

AD-A061249

USAFETAC/DS-79/066

DATA PROCESSING BRANCH
USAFETAC
Air Weather Service (MAC)

REVISED UNIFORM SUMMARY OF
SURFACE WEATHER OBSERVATIONS

RHEIN-MAIN APT GERMANY/FRANKFURT
N 50 02 E 008 34 FLD ELEV 368 FT EDDF WMAN# 35032
WMO# 10537

PARTS A-F

POR FROM HOURLY OBS: JAN 67-DEC 76
POR FROM DAILY OBS: SEP 46-DEC 67

AUG 18 1977

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19. KEY WORDS (Continue on reverse side if necessary and identify by block number) *RUSSWO Daily temperature Atmospheric pressure Snowfall Extreme snow depth Extreme surface winds Climatology Sea-level pressure Psychrometric summary Surface Winds Extreme temperature Ceiling versus visibility Relative humidity *Climatological data (over)		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This report is a six-part statistical summary of surface weather observations for Rhein-Main Apt, Frankfurt, Germany It contains the following parts: (A) Weather Conditions; Atmospheric Phenomena; (B) Precipitation, Snowfall and Snow Depth (daily amounts and extreme values); (C) Surface winds; (D) Ceiling Versus Visibility; Sky Cover; (E) Psychrometric Summaries (daily maximum and minimum temperatures, extreme maximum and minimum temperatures, psychrometric summary of wet-bulb temperature depression versus dry-bulb temperature, means and standard deviations of dry-bulb, wet-bulb (over)		

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1 JAN 73

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19. Percentqge frequency of distribution tables
Dry-bulb temperature versus wet-bulb temperature
Cumulative percentage frequency of distribution tables
* Germany * Rhein-Main Apt, Germany
20. and dew-point temperatures and relative humidity); and (F) Pressure
Summary (means, standard, deviations, and observation counts of
station pressure and sea-level pressure). Data in this report are
presented in tabular form, in most cases in percentage frequency of
occurrence or cumulative percentage frequency of occurrence tables.

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1 AD		INDEXER		CATALOGER	EDITOR	2 FLD		4											
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6 U-TITLE		14 OA-SERIES																	
7 C-TITLE		15 CONTRACT																	
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10 AUTHOR		18 M-ACTIVITY				38 DECLASS ON													
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22 DISTRIBUTION/AVAILABILITY STATEMENTS						39 CONF ON													
						21 SUPPLEMENTARY NOTE													
23 DESCRIPTORS						Frequency													
*	Germany					Distribution													
	Weather					Tables (DATA)													
	Atmospheres					Dew point													
	Precipitation					*	Meteorological data												
	Snow					*	Meteorological phenomena												
	Depth					Humidity													
	Surfaces					Atmospheric precipitation													
	Wind					Atmospheric temperature													
	Ceiling					Air Force facilities													
	Visibility					Military facilities													
	Temperature																		
	Mean																		
	Wet bulb temperature																		
	Barometric pressure																		
	Sea level																		
	Climate																		
	Standard deviation					24 DESCRIPTOR CLASSIFICATION													
25 IDENTIFIERS AND/OR OPEN-ENDED TERMS						U	C	S	R										
						CRD	CFRD	SRD	SFRD										
*	Rhein-Main Apt (Germany)					Dry-bulb temperature versus wet-bulb temperature													
*	Frankfurt (Germany)					Surface winds													
*	Climatological data					Percentage frequency of distribution table													
* RUSSWO (Revised Uniform Summary of Surface Weather Observations)					Extreme surface winds														
	Climatology					Cumulative percentage frequency of distribution table													
	Snowfall					Extreme snow depth													
	Ceiling versus visibility					Psychrometric summary													
	Daily temperature					Atmospheric pressure													
	Extreme temperature					Relative humidity													
27 ABSTRACT <input type="checkbox"/> DOC <input checked="" type="checkbox"/> AUTHOR <input type="checkbox"/> MOD. <input type="checkbox"/> NO ABST.						26 IDENT. & O.E. TERMS CLASSIFICATION													
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30 INDEX ANNOTATION (Must be unclassified)																			
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THE EXTREME VALUES COULD CONTAIN SUSPECT OR QUESTIONABLE DATA. SUCH CASES USUALLY APPEAR IN THE TABULATIONS AS A PERCENTAGE FREQUENCY OF ".0", WHICH USUALLY INDICATES ONLY ONE OCCURRENCE. THESE MAY OR MAY NOT BE COMPLETELY VALID, BUT THE USER SHOULD NOT DISREGARD THEM ENTIRELY. OBVIOUS ERRORS OR IMPOSSIBLE CONDITIONS HAVE BEEN LINED THROUGH IN BLACK INK.

U S AIR FORCE
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REVISED UNIFORM SUMMARY OF SURFACE WEATHER OBSERVATIONS

HOURLY OBSERVATIONS

Hourly observations are defined as those record or record-special observations recorded at scheduled hourly intervals.

DAILY OBSERVATIONS

Daily observations are selected from all data recorded on reporting forms and combined into Summary of the Day observations. (Selected from record-special, local, summary of the day, remarks, etc.)

DESCRIPTION OF SUMMARIES

Preceding each section is a brief description of the data comprising each part of the Revised Uniform Summary of Surface Weather Observations and the manner of presentation. Tabulations are prepared from hourly and daily observations recorded by stations operated by the U. S. Services and some foreign stations using similar reporting practices.

Unless otherwise noted the following summaries are included for this station:

PART A WEATHER CONDITIONS

ATMOSPHERIC PHENOMENA

PART B PRECIPITATION

SNOWFALL

SNOW DEPTH

PART C SURFACE WINDS

PART D CEILING VERSUS VISIBILITY

SKYCOVER

PART E DAILY MAX, MIN, & MEAN TEMP

EXTREME MAX & MIN TEMP

PSYCHROMETRIC-DRY VS WET BULB

MEAN & STD DEV
(DRY BULB, WET BULB, & DEW POINT)

RELATIVE HUMIDITY

PART F STATION PRESSURE

SEA LEVEL PRESSURE

STANDARD 3-HOUR GROUPS

All summaries requiring diurnal variations are summarized in eight 3-hour periods corresponding to the following sets of hourly observations: 0000-0200, 0300-0500, 0600-0800, 0900-1100, 1200-1400, 1500-1700, 1800-2000, 2100-2300 hours local standard time.

MISSING HOUR GROUPS

Summary sheets are omitted when stations maintaining limited observing schedules did not report certain three-hour periods for any particular month during the available period of record. Such missing sheets are listed below, and are applicable to all summaries prepared from hourly observations.

JANUARY _____

FEBRUARY _____

MARCH _____

APRIL _____

MAY _____

JUNE _____

JULY _____

AUGUST _____

SEPTEMBER _____

OCTOBER _____

NOVEMBER _____

DECEMBER _____

STATION NO ON SUMMARY 35032		STATION NAME RHEIN-MAIN APT/FRANKFURT GER		LATITUDE N 50 02		LONGITUDE E 008 34		FIELD ELEV (FT) 368		CALL SIGN EDDF		WMO NUMBER 10637	
STATION LOCATION AND INSTRUMENTATION HISTORY													
NUMBER OF LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FIELD (FT)	HT. BARD.					
1	Rhein-Main Frankfurt Germany	AAF	Sep 46	Sep 47	N 50 02	E 008 35	361	369 Ft	24				
2	Same	Same	Oct 47	Jun 48	Same	Same	Same	364	24				
3	Same	AB	Jul 48	Jul 51	Same	Same	Same	376	24				
4	Same	Same	Aug 51	Mar 54	Same	Same	Same	Same	24				
5	Same	Same	Apr 54	Mar 62	Same	Same	Same	368	24				
6	Rhein-Main Apt Frankfurt Ger	GZMO	Apr 62	Dec 76	Same	E008 34	366 Ft	Same	24				

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	
1	Sep 46	Located 2nd Floor of Operation Bldg	Selsyn	None	40 Ft	
2	Nov 46	Same	Same	Same	57 Ft	
3	Dec 46	Located 2nd Floor of New Terminal Bldg.	Same	Same	Same	
4	Apr 47	Located on Hangar W of new terminal bldg.	Same	Same	40 Ft	
5	Jul 48	Located on the ROS	Siemens	Same	43 Ft	
6	Apr 62	N/A	Same	Fuess	30 Ft	
7	Dec 70	N/A	AN/GMQ-20	ROS 362	13 Ft	
8	Dec 76	Same	Same	Same	Same	

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PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

CONTINUED ON REVERSE SIDE

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A

PART A

WEATHER CONDITIONS

This summary is a percentage frequency occurrence of various atmospheric phenomena and obstructions to vision, derived from hourly observations, and is presented in two tables as follows:

1. By month and annual, all hours and years combined.
2. By month, all years combined, by standard 3-hour groups.

A percent value of ".0" in these tables indicates less than .05 percent, which is usually only one occurrence. The various phenomena included in each category on the forms are listed below:

Thunderstorms - All reported occurrences of thunderstorm, tornado, and waterspout.

Rain and/or drizzle - All liquid precipitation, falling to the ground, not freezing.

Freezing rain and/or freezing drizzle (glaze) - Precipitation falling in liquid form, but freezing on contact with an unheated surface.

Snow and/or sleet (ice pellets) - Included are snow, snow pellets, sleet, snow grains, ice crystals, and ice pellets from Jan 68 and later. (Snow pellets also known as soft hail)

Hail - Occurrences of hail and small hail are included.

Percentage of observations with precipitation - Included in this category are the observations when one or more of the above phenomena occurred. Since more than one type of precipitation may be reported in the same observation, the sums of the individual categories may exceed the percentages of the observations with precip.

Fog - Included are fog, ice fog, and ground fog.

Smoke and/or haze - Occurrences of smoke, haze, or combinations of smoke and haze are included.

Blowing snow - Occurrences of blowing snow (also drifting snow when reported from non-WBAN sources).

Dust and/or sand - Included are blowing dust, blowing sand, and dust.

Continued on Reverse

Blowing spray - This item if reported, is not shown in a separate category on this form but is included in the computation Percentage of Observations with Obstructions to Vision, below.

Percentage of observations with obstructions to vision - Included in this category are the observations when one or more of the above obstructions to vision occurred. Since more than one type of obstruction may be reported in the same observation, the sums of the individual categories may exceed the percentage total columns. Also, although precipitation may reduce visibility, it is not considered an obstruction to vision for purposes of this summary; therefore, the percentage total of obstructions to vision need not reflect the total observations with reduced visibility.

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

WEATHER CONDITIONS

35032 STATION RHEIN-MAIN ABT GERMANY/FRANKFURT 67-76 YEARS ALL MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (LST.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO OF OBS.
JAN	ALL	.0	12.4	.8	6.4	.0	19.1	16.7	.7	.1		17.5	7177
FEB			10.2	.2	5.0		14.8	10.6	.6	.1		11.3	6512
MAR		.0	11.1		2.5		13.1	5.9	1.8			7.7	7117
APR		.1	12.8		.4		13.0	3.2	.6			3.9	6833
MAY		.7	11.5		.0	.0	11.6	4.7	.7			5.4	7046
JUN		1.0	9.6				9.6	4.4	.5			4.9	6827
JUL		1.0	6.4				6.4	4.6	1.4			6.0	6913
AUG		1.2	8.4				8.4	7.2	1.3			8.5	7049
SEP		.3	8.3	.0			8.3	14.8	1.7			16.5	6818
OCT		.0	12.4				12.4	22.4	1.5		.0	23.9	7055
NOV			15.5	.1	2.5		17.3	20.1	.6			20.7	6852
DEC		.0	11.0	.7	6.5		17.3	22.3	1.6			23.9	7126
TOTALS		.4	10.8	.2	1.9	.0	12.6	11.4	1.1	.0	.0	12.5	83328

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WEATHER CONDITIONS

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS JAN MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER
 CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (LST.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS W/ 4 OBST TO VISION	TOTAL NO. OF OBS.
JAN	00-02		12.6	.8	6.0		18.9	15.4	.1	.1		15.6	889
	03-05		12.3	1.2	7.2		20.0	18.6		.2		18.8	899
	06-08		13.3	1.2	6.7		20.9	21.2				21.2	899
	09-11		12.8	.6	7.0		20.2	21.0	1.0			22.0	904
	12-14		12.5	.8	6.6		19.2	14.7	2.6			17.3	897
	15-17		11.8	.3	6.4		18.3	13.6	1.7			15.3	889
	18-20	.1	11.7	.3	5.7	.1	17.5	14.2	.1	.1		14.5	899
	21-23		11.2	1.0	5.3		17.6	15.0		.3		15.3	901
TOTALS		.0	12.4	.8	6.4	.0	19.1	16.7	.7	.1		17.5	7177

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

WEATHER CONDITIONS

35032 STATION RHEIN-MAIN APT GERMANY, FRANKFURT 67-76 YEARS FEB MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
FEB	00-02		9.9		4.7		14.0	14.8	.5			15.3	809
	03-05		9.2	.2	5.3		14.1	14.9				14.2	811
	06-08		9.5	.4	6.7		15.9	18.4	.2	.1		18.8	810
	09-11		10.2	.1	7.4		16.6	12.2	.9	.4		13.4	814
	12-14		11.2	.6	4.3		15.5	3.9	1.1			5.0	813
	15-17		9.1	.2	5.0		14.0	3.9	1.2			5.2	815
	18-20		12.1	.2	3.1		15.0	6.2	.4	.1		6.7	819
	21-23		10.3		3.2		13.1	10.6	.6	.1		11.3	824
TOTALS			10.2	.2	5.0		14.8	10.6	.6	.1		11.3	6515

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/HAC

WEATHER CONDITIONS

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS MAR MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS
MAR	00-02		10.2		2.3		12.2	9.7	.9			10.6	875
	03-05		11.8		4.8		15.7	10.0	.3			10.3	892
	06-08		11.3		5.0		15.3	12.8	1.8			14.6	897
	09-11		11.4		2.7		13.2	4.1	3.7			7.8	894
	12-14		11.2		1.6		12.6	1.6	2.3			3.9	896
	15-17	.3	10.9		1.1		11.8	.6	2.5			3.3	884
	18-20		11.1		1.0		12.1	2.7	2.1			4.8	900
	21-23		10.8		1.4		11.6	5.2	1.1			6.4	879
TOTALS		.0	11.1		2.9		13.1	5.9	1.8			7.7	7117

DATA PROCESSING BRANCH
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WEATHER CONDITIONS

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS APR MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HALE	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO OF OBS.
APR	00-02		11.1		.4		11.2	4.9				4.9	836
	03-05		13.4		.2		13.5	8.8				8.8	853
	06-08		14.3		.8		14.9	7.9	.7			8.6	865
	09-11		13.2		.5		13.5	1.5	1.8			3.3	869
	12-14		11.4		.3		11.5	.5	1.2			1.6	858
	15-17	.8	12.9		.6		13.2	.2	.6			.8	865
	18-20		13.6		.1		13.6	.5	.4			.8	847
	21-23		12.5		.1		12.5	1.3	.4			1.7	840
TOTALS		.1	12.8		.4		13.0	3.2	.6			3.8	6833

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

WEATHER CONDITIONS

35032 STATION RHEIN-MAIN AFB GERMANY/FRANKFURT 67-76 YEARS DAY MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO OF OBS.
MAY	00-02	.3	11.2			.1	11.3	8.3	.1			8.4	865
	03-05	.5	12.4				12.4	13.4	.1			13.5	880
	06-08	.3	12.3				12.3	9.4	1.9			11.3	887
	09-11	.2	9.4		.1		9.5	1.0	1.6			2.6	887
	12-14	.5	11.0			.1	11.1	.1	.2			.3	881
	15-17	2.3	12.2				12.2	.3	.3			.7	878
	18-20	1.0	11.8				11.8	1.6	.8			2.4	883
	21-23	.6	12.0				12.0	3.4	.3			3.7	885
TOTALS		.7	11.5		.0	.0	11.6	4.7	.7			5.4	7046

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WEATHER CONDITIONS

35032 STATION 3HEIN-HAIN APT GERMANY/FRANKFURT 67-70 YEARS

JUN
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
JUN	00-02	.5	8.9				8.9	7.6				7.6	847
	03-05	.4	8.6				8.6	14.9				14.9	844
	06-08	.1	7.1				7.1	8.6	2.0			10.6	861
	09-11	.3	8.6				8.6	1.6	1.6			3.2	865
	12-14	1.1	11.0				11.0	.2	.1			.4	846
	15-17	3.5	13.0				13.0		.2			.2	851
	18-20	1.3	10.2				10.2	.1	.2			.3	865
	21-23	.7	9.2				9.2	1.9	.1			2.0	848
TOTALS		1.0	9.6				9.6	4.6	.5			4.9	6827

DATA PROCESSING BRANCH
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AIR WEATHER SERVICE/MAC

WEATHER CONDITIONS

35032 STATION RHEIN-MAIN AFB GERMANY/FRANKFURT 67-76 YEARS JUL MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS
JUL	00-02	1.0	6.4				6.4	6.6	.2			6.9	861
	03-05	1.3	5.7				5.7	15.8	.1			15.9	863
	06-08		7.1				7.1	10.3	2.6			13.0	872
	09-11	.2	7.4				7.4	.8	3.6			4.4	877
	12-14	.7	7.2				7.2	.1	1.4			1.5	848
	15-17	1.6	7.7				7.7	.2	1.8			2.1	869
	18-20	1.9	5.1				5.1	.7	.5			1.2	863
	21-23	1.5	4.9				4.9	2.4	.6			3.0	860
TOTALS		1.0	6.4				6.4	4.6	1.4			6.0	6913

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

WEATHER CONDITIONS

35032 STATION RHEIN-MAIN AFB GERMANY/FRANKFURT 67-76 YEARS AUG MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO OF OBS
AUG	00-02	1.0	8.3				8.3	9.7				9.7	864
	03-05	.5	7.7				7.7	18.7	.1			18.8	878
	06-08		9.0				9.0	18.0	1.5			19.5	882
	09-11	.3	7.0				7.0	4.3	4.0			8.3	899
	12-14	1.7	7.6				7.6	1.1	1.6			2.7	876
	15-17	2.7	7.9				7.9	.2	1.5			1.7	881
	18-20	2.3	9.2				9.2	1.1	1.1			2.3	881
	21-23	1.2	10.4				10.4	4.6	.3			5.0	886
TOTALS		1.2	8.4				8.4	7.2	1.3			8.5	7049

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

WEATHER CONDITIONS

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS SEP MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (LST.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
SEP	00-02	.5	7.5				7.5	21.9				21.9	842
	03-05	.2	7.0	.1			7.2	32.0				32.0	853
	06-08		8.2				8.2	30.9	.9			31.8	858
	09-11	.1	9.8				9.8	10.4	6.1			16.4	859
	12-14	.1	5.9				5.9	2.1	3.3			5.4	849
	15-17	.6	9.4				9.4	.9	2.2			3.1	862
	18-20	.8	10.0				10.0	6.0	1.4			7.4	851
	21-23	.4	8.4				8.4	14.2				14.2	844
TOTALS		.3	8.3	.0			8.3	14.8	1.7			16.5	6818

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

WEATHER CONDITIONS

35032 RHEIN-MAIN ART GERMANY/FRANKFURT
STATION STATION NAME

67-76

YEARS

OCT
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (LST.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS
OCT	00-02		11.9				11.9	28.0	.1			28.1	857
	03-05		14.5				14.5	30.1				30.1	876
	06-08		15.1				15.1	36.1	.1			36.2	883
	09-11		12.4				12.4	21.6	3.2			24.8	895
	12-14		10.8				10.8	9.4	4.6		.1	14.2	879
	15-17	.1	13.0				13.0	11.3	3.8		.1	15.3	890
	18-20		10.5				10.5	18.8	.1			19.0	886
	21-23	.1	11.2				11.2	23.4	.1			23.5	889
TOTALS		.0	12.4				12.4	22.4	1.5		.0	23.9	7055

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

WEATHER CONDITIONS

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (L.S.T.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO OF OBS
NOV	00-02		14.2		1.7		14.9	22.3	.1			22.4	831
	03-05		16.4	.5	2.7		18.8	25.7				25.7	874
	06-08		15.7	.3	3.1		18.5	27.6				27.6	870
	09-11		17.1		3.6		19.6	20.2	.8			21.1	855
	12-14		14.7	.2	2.4		16.7	15.0	2.2			17.2	848
	15-17		13.5		1.6		14.6	15.8	1.4			17.2	850
	18-20		15.4		2.4		16.7	15.9				15.9	866
	21-23		16.7		2.1		18.3	18.4	.2			18.6	858
TOTALS			15.5	.1	2.5		17.3	20.1	.6			20.7	6852

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

WEATHER CONDITIONS

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS DEC MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS FROM HOURLY OBSERVATIONS

MONTH	HOURS (LST.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	LOW SNC	DUST AND/OR ND	% OF OBS WITH OBST TO VISION	TOTAL NO OF OBS.
DEC	00-02		11.5	1.3	5.1		16.9	23.0	.1			23.1	877
	03-05		10.4	1.2	6.2		17.2	23.0	.3			23.3	901
	06-08		10.1	.9	8.2		18.2	25.3	.6			25.8	894
	09-11		11.2	.3	7.7		18.4	24.3	1.8			26.1	898
	12-14		11.1	.1	5.9		15.6	19.3	4.6			23.9	883
	15-17	.1	11.9	.1	6.5		17.2	20.3	3.5			23.8	902
	18-20		11.4	.8	6.8		17.9	21.1	1.4			22.4	883
	21-23		10.5	.8	5.7		16.6	21.7	.8			22.5	888
TOTALS		.6	11.0	.7	6.5		17.3	22.3	1.6			23.9	7126

PART A

ATMOSPHERIC PHENOMENA

This summary is a presentation of the percentage of days with occurrence of various atmospheric phenomena. These data are obtained from all recorded information on the reporting forms or from hourly data and combined into a daily observation.

The descriptions of the phenomena in the Weather Conditions Summary above also apply for the categories summarized in these daily tabulations. However, it should be noted that in this summary the columns headed "% OF OBS WITH PRECIP" and "% OF OBS WITH OBST TO VISION" show the percentage of days rather than the percentage of observations. Since more than one type of precipitation or more than one type of obstruction may occur in the same daily observation, the sum of the values in the individual categories may differ from the total columns.

A percent value of ".0" in the table indicates less than .05 percent, which is usually only one occurrence.

This presentation is by month with annual totals, and is prepared with all years combined.

- NOTES: (1) A day with rain and/or drizzle was not separately reported in the WBAN data prior to year 1949. Therefore, percentages in this column are restricted to the period Jan 1949 and later.
- (2) A day with freezing rain and/or freezing drizzle is also properly reported as a day with rain and/or drizzle.
- (3) A day with dust and/or sand is included in this summary only when visibility is reduced to less than $5/8$ mile.

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

XXXXXXXXXXXXXXXXXXXXXXXXXXXX
WEATHER CONDITIONS
XXXXXXXXXXXXXXXXXXXXXXXXXXXX
ATMOSPHERIC PHENOMENA

35032 STATION REIN-HAIN APT GERMANY/FRANKFURT 46-67 YEARS ALL MONTH

PERCENTAGE OF DAYS WITH VARIOUS ATMOSPHERIC PHENOMENA
FROM DAILY OBSERVATIONS

MONTH	HOURS (LST.)	THUNDER- STORMS	RAIN AND/OR DRIZZLE	FREEZING RAIN & /OR DRIZZLE	SNOW AND/OR SLEET	HAIL	% OF OBS WITH PRECIP.	FOG	SMOKE AND/OR HAZE	BLOWING SNOW	DUST AND/OR SAND	% OF OBS WITH OBST TO VISION	TOTAL NO. OF OBS.
JAN	DAILY		50.6	2.9	33.0		68.2	66.1	35.9			76.7	551
FEB		1.0	51.1	2.2	28.0	.7	62.4	66.9	44.0	.2		74.2	593
MAR		1.2	44.8	.3	13.4	.6	49.0	58.8	49.8			71.0	651
APR		5.1	61.1		3.3	.8	57.3	44.8	32.9		.2	57.1	630
MAY		12.1	58.1		.5	.6	53.9	43.9	24.3			51.5	651
JUN		18.3	57.1			.6	53.9	49.1	25.1			56.8	629
JUL		14.7	54.5				51.8	45.2	24.2		.2	53.3	651
AUG		13.7	58.6			.2	55.1	53.5	27.0		.1	59.6	651
SEP		4.1	50.7			.2	46.7	69.7	39.7			78.0	660
OCT		1.2	50.3		.3		46.9	78.0	46.8	.1		84.9	682
NOV		.3	63.7	.3	10.2		63.5	79.1	34.5	.2		83.9	660
DEC		.3	61.1	4.0	24.0	.1	66.1	77.3	28.7			82.4	682
TOTALS		6.0	55.1	.8	9.4	.3	56.2	61.0	34.4	.0	.0	69.1	7791

U S AIR FORCE
ENVIRONMENTAL TECHNICAL
APPLICATIONS CENTER

PART B PRECIPITATION, SNOWFALL & SNOW DEPTH

This part of the Uniform Summary consists of eight summaries derived from daily observations as follows:

1. The first set presents, in three tables, the percentage frequency of various daily amounts of PRECIPITATION, SNOWFALL, and SNOW DEPTH. The daily amount summary is prepared by month and annual, all years combined, and includes percent of days with measurable amounts; percent of days having none, traces, and given amounts; and means, greatest and least monthly amounts. (The last three statistics are omitted from the snow depth summary because of their doubtful and limited value.) A total count of valid observations is given for months and annual. Stations are included in which a portion or all of the period may contain months with missing days. This will be noted on the summary pages. A percent value of ".0" in these daily amount tables indicates less than .05 percent which is usually only one occurrence.
2. The second set of three tables presents the extreme daily amounts, by individual year and month, of PRECIPITATION, SNOWFALL, and SNOW DEPTH for the entire period of record available. Also provided are the means and standard deviations for each month and annual (all months) and the total valid observation count. An asterisk (*) is printed in any year-month block when the extreme value is based on an incomplete month (at least one day missing for the month). When a month has valid observations reported but no occurrences, zeros are given in the tables as follows:

EXTREME DAILY PRECIPITATION	"00"	equals none for the month (hundredths)
EXTREME DAILY SNOWFALL	".0"	equals none for the month (tenths)
EXTREME DAILY SNOW DEPTH	"0"	equals none for the month (whole inches)

3. The third set of two tables provides the total monthly amounts of PRECIPITATION and SNOWFALL for each year-month and annual. Also prepared are the means, standard deviations, and total number of valid observations for each month and annual (all months). An asterisk (*) is printed in each data block if one or more days are missing for the month. No occurrences for a month are indicated in the same manner as in the extreme tables above. If a trace becomes the extreme or monthly total in any of these tables it is printed as "TRACE."

Continued on Reverse Side

- NOTES: (1) The above studies may also be prepared for stations operating for less than full months for portions or all of the period of record. This may include stations operating 5 or 6 days a week and those with only random days missing. An asterisk (*) in the data blocks will give an indication that a month is incomplete. Please refer to Station History at front of book and observation counts in each summary to evaluate the amounts of data missing.
- (2) Hail was included in snowfall occurrences in the summary of day observations prior to Jan 56, but these occurrences have been removed from snowfall category and counted as Hail in these summaries.
- (3) Snow Depth was recorded and punched at various hours during the period available from U. S. operated stations. The hours used by each service for each period are as follows:

Air Force Stations:

Beginning thru 1945	at 0800LST
Jan 46-May 47	at 1230GMT
Jun 57-present	at 1200GMT

U. S. Navy and National Weather Service (USWB)

Beginning thru Jun 52	at 0030GMT
Jul 52-May 57	at 1230GMT
Jun 57-present	at 1200GMT

2 DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

DAILY AMOUNTS

PERCENTAGE FREQUENCY OF
PRECIPITATION
(FROM DAILY OBSERVATIONS)

35037 REIN-MAIN APT GERMANY/FRANKFURT 45-67

STATION

STATION NAME

YEARS

PRECIP.	AMOUNTS (INCHES)													PERCENT OF DAYS WITH MEASUR- ABLE AMTS	TOTAL NO. OF OBS	MONTHLY AMOUNTS (INCHES)		
	NONE	TRACE	.01	.02-.05	.06-.10	.11-.25	.26-.50	.51-1.00	1.01-2.50	2.51-5.00	5.01-10.00	10.01-20.00	OVER 20.00			MEAN	GREATEST	LEAST
SNOWFALL	NONE	TRACE	01-0.4	0.5-1.4	1.5-2.4	2.5-3.4	3.5-4.4	4.5-6.4	6.5-10.4	10.5-15.4	15.5-25.4	25.5-50.4	OVER 50.4					
SNOW- DEPTH	NONE	TRACE	1	2	3	4-6	7-12	13-24	25-36	37-48	49-60	61-120	OVER 120					
JAN	27.6	28.1	6.8	12.6	7.6	12.1	3.9	1.2						44.3	644	1.60	3.86	TRACE
FEB	33.7	23.4	7.3	12.6	7.8	10.1	4.3	.5	.2					42.9	564	1.35	3.80	.10
MAR	47.4	18.5	4.2	9.2	6.8	7.6	5.2	1.1						34.0	620	1.47	3.91	.07
APR	38.1	19.2	4.5	11.2	8.2	11.7	5.3	1.8						42.7	599	1.82	4.10	.27
MAY	41.8	18.2	4.7	10.0	5.3	10.5	6.5	2.6	.5					40.0	620	2.27	4.04	.57
JUN	42.4	15.7	3.5	9.7	7.0	9.5	7.5	3.7	1.0					41.9	599	2.77	5.33	.25
JUL	43.7	16.1	3.7	7.6	7.1	11.5	6.9	2.4	1.0					40.2	620	2.49	5.10	.08
AUG	44.1	16.3	4.0	7.2	5.4	10.2	6.3	3.2	1.1	.2				39.6	649	2.95	5.81	.10
SEP	51.6	12.1	3.9	6.7	7.1	9.4	6.4	2.3	.5					36.3	659	2.00	5.37	.11
OCT	51.8	14.4	3.8	8.7	4.6	10.1	3.7	2.3	.6					33.6	681	1.88	5.32	.19
NOV	34.6	18.9	6.5	10.4	9.7	12.0	5.2	2.3	.3					46.6	657	2.11	5.20	.31
DEC	28.7	25.1	6.8	12.4	7.5	9.9	6.6	2.4	.6					46.2	677	2.14	4.87	.25
ANNUAL	40.5	18.8	5.0	9.9	7.0	10.4	5.8	2.1	.5	.0				40.7	7589	2.45		

EXTREME VALUES

PRECIPITATION

FROM DAILY OBSERVATIONS

STATION

STATION NAME

YEARS

[illegible]

NOTE * (BASED ON 2 FULL MONTHS)

USAF ETAC FORM 0-88-5 (OIA)

DATA PROCESSING BRANCH
USAF/ETAC/DL A
AIR WEATHER SERVICE/MAC

XXXXXXXXXXXXXXXXXXXX
EXTREME VALUES
XXXXXXXXXXXXXXXXXXXX
MONTHLY PRECIPITATION

(FROM DAILY OBSERVATIONS)

35032 REIN-MAIN APT GERMANY/FRANKFURT 46-67
STATION STATION NAME YEARS

TOTAL MONTHLY PRECIPITATION IN INCHES

MONTH YEAR	JAN.	FEB	MAR.	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ALL MONTHS
46									* 2.51	1.25	1.19*	1.04	
47	*TRACE							* .10	.92	.37	2.24	3.04	
48	2.73*	.94	.53	1.12	2.28	1.69	2.40	2.65	.42	1.95*	.43	.60	*17.74
49	.50	.41	1.22	.27	3.51	.74	.08	3.01	1.43	1.31	.76	1.78	15.02
50	.33	1.41	.07	3.17	4.01	3.44	2.91	2.93	3.03	.86	3.74	2.49	28.39
51	2.53	1.09	2.15	1.10	2.34	3.83	1.43	2.37	1.81	.68	2.00	.83	22.15
52	2.88	1.26	2.60	1.48	.74	2.98	1.68	2.36	4.37	2.76	5.20	3.17	31.48
53	.53	.87	.19	2.07	1.15	3.39	2.48	1.04	.89	2.02	.31	1.05	15.99
54	1.37	.69	1.28	1.26	1.09	2.58	3.18	3.57	3.32	2.09	1.48	3.68	25.59
55	1.81	1.75	.92	.36	3.05	3.41	2.78	2.43	1.37	1.14	.76	3.55	23.33
56	2.37	.37	.64	3.11	1.75	4.57	3.30	4.27	1.96	2.62	1.33	1.10	27.39
57	1.63	3.80	2.40	1.18	2.78	1.67	2.70	2.51	5.37	1.53	.67	1.36	27.60
58	2.57	2.43	1.33	.78	4.04	3.40	2.25	5.68	1.66	1.91	1.26	2.59	29.90
59	1.53	.10	1.57	2.17	.37	3.75	2.10	.67	.11	1.60	.92	2.00	17.09
60	1.84	1.72	1.01	1.28	2.82	.81	3.70	5.31	.96	5.32	2.94	2.64	30.35
61	1.81	1.58	.47	2.47	3.13	3.63	5.10	2.03	1.55	2.56	3.33	1.84	29.50
62	1.94	2.51	2.23	2.10	2.68	.23	1.21	2.21	1.38	.66	1.40	2.80	21.35
63	.67	.72	3.91	.90	1.58*	2.75	2.35	5.81	2.08	2.00	2.68	.25	*25.70
64	.54	1.26	1.83*	1.99	1.09	1.04	.42	1.01	1.34	2.17	4.97	.61	*18.27
65	3.86	.46	2.25	3.67	2.42	5.33	4.34	2.19	3.54	.19	4.17	4.87	37.29
66	1.29	1.87	1.31	4.10	1.50	4.43	3.39	5.44	.90*	3.26	2.85	4.01	*34.35
67	.83	1.85	1.47	1.85	2.80	1.67	2.00	4.44	3.14	3.11	1.85	1.88	26.89
MEAN	1.598	1.353	1.469	1.822	2.267	2.767	2.490	2.934	2.003	1.880	2.113	2.145	25.269
S.D.	.999	.886	.938	1.062	1.044	1.416	1.213	1.669	1.316	1.150	1.448	1.246	6.265
TOTAL OBS.	644	564	620	599	620	599	620	649	659	681	657	677	7589

NOTE * (BASED ON < FULL MONTHS)

USAF ETAC FORM 0-88-5 (OEA)

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

DAILY AMOUNTS

PERCENTAGE FREQUENCY OF
SNOWFALL
(FROM DAILY OBSERVATIONS)

35032 REIN-MAIN APT GERMANY/FRANKFURT 46-67

STATION

STATION NAME

YEARS

PRECIP	AMOUNTS (INCHES)													PERCENT OF DAYS WITH MEASUR- ABLE AMTS	TOTAL NO. OF OBS.	MONTHLY AMOUNTS (INCHES)		
	NONE	TRACE	.01	.02-.05	.06-.10	.11-.25	.26-.50	.51-1.00	1.01-2.50	2.51-5.00	5.01-10.00	10.01-20.00	OVER 20.00			MEAN	GREATEST	LEAST
SNOWFALL	NONE	TRACE	0.1-0.4	0.5-1.4	1.5-2.4	2.5-3.4	3.5-4.4	4.5-6.4	6.5-10.4	10.5-15.4	15.5-25.4	25.5-50.4	OVER 50.4					
SNOW- DEPTH	NONE	TRACE	1	2	3	4-6	7-12	13-24	25-36	37-48	49-60	61-120	OVER 120					
JAN	67.2	20.6	4.9	4.8	1.5	.5	.2	.2	.2					12.2	647	4.2	10.7	TRACE
FEB	72.2	17.9	3.2	4.1	1.0	.4	.4		.2					9.9	564	3.5	16.7	.0
MAR	87.1	9.5	1.8	.6	.5	.3	.2							3.4	620	1.1	4.2	.0
APR	96.5	3.2	.2		.2									.3	630	.1	2.0	.0
MAY	99.5	.5													651	TRACE	TRACE	.0
JUN	100.0														629	.0	.0	.0
JUL	100.0														651	.0	.0	.0
AUG	100.0														651	.0	.0	.0
SEP	100.0														660	.0	.0	.0
OCT	99.7	.3													682	TRACE	TRACE	.0
NOV	92.6	5.5	.8	.8	.3		.2							2.0	658	.6	6.7	.0
DEC	76.2	17.4	1.8	3.0	1.2	.1	.1		.1					6.4	677	2.5	19.1	.0
ANNUAL	90.9	6.2	1.1	1.1	.5	.1	.1	.0	.0					2.8	7720	12.0		

DATA PROCESSING BRANCH
USAF/ETAC/DL A
AIR WEATHER SERVICE/MAC

EXTREME VALUES SNOWFALL

(FROM DAILY OBSERVATIONS)

35032 REIN-MAIN APT GERMANY/FRAANKFURT 46-67

STATION

STATION NAME

YEARS

24 HOUR AMOUNTS IN INCHES

MONTH YEAR	JAN.	FEB	MAR	APR	MAY	JUN	JUL	AUG.	SEP	OCT	NOV	DEC	ALL MONTHS
46									.0	.0	.5	*TRACE	
47	*TRACE			.0	.0	.0	.0	.0	.0	.0	.5	1.5	
48	3.3*	1.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	TRACE	3.3
49	.6	TRACE	2.5	TRACE	.0	.0	.0	.0	.0	.0	TRACE	2.8	2.8
50	1.1	1.1	TRACE	.0	.0	.0	.0	.0	.0	TRACE	TRACE	9.6	9.6
51	.8	.4	.4	TRACE	.0	.0	.0	.0	.0	.0	.0	TRACE	.8
52	8.7	3.1	3.5	2.0	.0	.0	.0	.0	.0	.0	2.2	2.0	8.7
53	1.6	3.9	TRACE	.0	.0	.0	.0	.0	.0	.0	TRACE	.4	3.9
54	2.4	1.2	.0	TRACE	.0	.0	.0	.0	.0	.0	TRACE	TRACE	2.4
55	2.0	3.5	2.0	.0	.0	.0	.0	.0	.0	.0	TRACE	.7	3.5
56	2.8	2.4	TRACE	TRACE	.0	.0	.0	.0	.0	.0	TRACE	.8	2.8
57	.8	.1	.0	TRACE	TRACE	.0	.0	.0	.0	.0	TRACE	.8	.8
58	2.4	2.0	2.0	.4	.0	.0	.0	.0	.0	.0	.0	TRACE	2.4
59	2.0	TRACE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.0
60	1.6	TRACE	TRACE	TRACE	.0	.0	.0	.0	.0	.0	TRACE	1.6	1.6
61	2.8	TRACE	TRACE	.0	.0	.0	.0	.0	.0	.0	TRACE	TRACE	2.8
62	TRACE	1.2	1.6	TRACE	.0	.0	.0	.0	.0	.0	3.5	1.2	3.5
63	4.3	2.4	.0	.0	.0*	.0	.0	.0	.0	.0	.0	.6	4.3
64	5.9	7.9	TRACE	TRACE	.0	.0	.0	.0	.0	.0	.0	3.9	7.9
65	.4	.8	2.8	.0	.0	.0	.0	.0	.0	.0	.0*	1.2	2.8
66	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.8	.8
67	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0*	.0*	1.6	* 1.6
MEAN	2.13	1.59	.74	.11	TRACE	.00	.00	.00	.00	TRACE	.38	1.30	3.42
S. D.	2.108	1.954	1.172	.441	.000	.000	.000	.000	.000	.000	.874	2.112	2.513
TOTAL OBS.	647	564	620	630	651	629	651	651	660	682	658	677	7720

NOTE * (BASED ON < FULL MONTHS)

USAF ETAC FORM 0-88-5 (OLA)

XXXXXXXXXXXXXXXXXXXX
EXTREME VALUES
XXXXXXXXXXXXXXXXXXXX
MONTHLY SNOWFALL

(FROM DAILY OBSERVATIONS)

YEARS:

[illegible]

NOTE * (BASED ON 4 FULL MONTHS)

USAF ETAC FORM 0-88-5 (OLA)

2
DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

DAILY AMOUNTS

PERCENTAGE FREQUENCY OF
SNOW DEPTH
(FROM DAILY OBSERVATIONS)

35032 REIN-MAIN APT GERMANY/FRANKFURT 46-67

STATION

STATION NAME

YEARS

PRECIP.	AMOUNTS (INCHES)													PERCENT OF DAYS WITH MEASUR- ABLE AMTS	TOTAL NO OF OBS	MONTHLY AMOUNTS (INCHES)		
	NONE	TRACE	01	.02-.05	.06-.10	.11-.25	.26-.50	.51-1.00	1.01-2.50	2.51-5.00	5.01-10.00	10.01-20.00	OVER 20.00			MEAN	GREATEST	LEAST
SNOWFALL	NONE	TRACE	01-04	0.5-1.4	1.5-2.4	2.5-3.4	3.5-4.4	4.5-6.4	6.5-10.4	10.5-15.4	15.5-25.4	25.5-50.4	OVER 50.4					
SNOW- DEPTH	NONE	TRACE	1	2	3	4-6	7-12	13-24	25-36	37-48	49-60	61-120	OVER 120					
JAN	69.3	11.1	9.0	3.1	1.2	3.7	.5							19.5	646			
FEB	76.1	5.0	4.8	3.3	3.0	5.7	.2							18.9	565			
MAR	93.7	3.4	1.1	1.1	.3	.3								2.9	620			
APR	99.5	.5													630			
MAY	100.0														651			
JUN	100.0														629			
JUL	100.0														651			
AUG	100.0														651			
SEP	100.0														660			
OCT	100.0														682			
NOV	96.2	1.8	1.2	.2	.2	.5								2.0	658			
DEC	82.9	7.1	5.4	3.1	.4	.3	.7							10.0	679			
ANNUAL	95.1	2.4	1.8	1.2	.4	.9	.1							4.4	7722			

USAF ETAC FORM 0-88-9 (OLA)

U S AIR FORCE
ENVIRONMENTAL TECHNICAL
APPLICATIONS CENTER

PART C

SURFACE WINDS

Presented in this part are various tabulations of surface winds as follows:

1. Extreme Values - Peak Gusts: Derived from daily observations and presented by individual year and month for the entire period of record available. Speeds are presented in knots, while directions are given in 16 compass points from the beginning of record through June 1968, and in tens of degrees starting in July 1968. The extreme is selected and printed from available peak gusts for each year-month, however an asterisk (*) is printed in the data block if less than 90% (3 or more missing observations) of the peak gusts are available for the month. An ALL MONTHS value is presented when every month of the year has valid observations. Means and standard deviations are also computed when four or more values are present for any column. A total raw count of valid observations is presented for each month and ALL MONTHS.

NOTE: According to Federal Meteorological Handbook No. 1 specifications (formerly Circular N), "peak gust data are recorded only at stations with continuous instantaneous wind-speed recorders." DATA NOT AVAILABLE

2. Bivariate percentage frequency tabulations: Derived from hourly observations, these tabulations are a percentage frequency of wind directions to 16 compass points and calm by wind speeds (knots) in increments of Beaufort classifications. Percentages are shown by both directions and speed, and in addition the mean wind speed is given for each direction.

A separate category is provided on the form for variable winds, which are reported in some data sources. In these data where light and variable winds are reported with no directions but with speeds given, the speeds will be summarized in the appropriate groups opposite the column headed VRBL.

- a. Three tables are prepared for ALL WEATHER surface winds, all years combined, by: (1) Annual - all hours combined, (2) By month - all hours combined, and (3) By month - by standard 3-hour groups.
- b. A separate annual table is also presented for surface winds meeting INSTRUMENT CLASS conditions as follows: Ceiling 200 through 1400 feet inclusive with visibility equal to or greater than 1/2 mile, and/or visibility 1/2 through 2-1/2 miles inclusive with ceiling equal to or greater than 200 feet.

NOTE: A percentage frequency of ".0" in these tables represents one or more occurrences amounting to less than ".05" percent.

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS ALL MONTH ALL MOSES (L.S.T.)

ALL WEATHER

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.0	1.1	.7	.2	.0							3.0	5.2
NNE	2.0	2.9	2.9	1.5	.1	.0						9.4	6.8
NE	3.9	4.8	2.5	.8	.1	.0						12.1	5.3
ENE	3.3	2.7	1.0	.1	.0							7.2	4.2
E	2.7	1.9	.7	.1								5.4	3.9
ESE	1.2	.7	.3	.0								2.2	3.7
SE	.7	.3	.1	.0								1.1	3.4
SSE	.9	.3	.1	.0								1.3	3.0
S	2.6	2.8	2.1	.6	.0	.0						8.2	5.4
SSW	1.9	3.6	4.6	2.6	.3	.0						13.0	7.6
SW	1.3	2.4	3.4	3.0	.6	.1	.0	.0				10.9	9.0
WSW	1.0	1.5	1.8	1.7	.5	.1	.0					6.7	8.9
W	.5	1.1	1.5	1.2	.3	.1	.0					4.6	8.9
WNW	.2	.8	1.1	.5	.1	.0	.0					2.7	8.0
NW	.2	.7	1.1	.5	.0	.0						2.6	7.8
NNW	.4	.6	.6	.2	.0	.0						1.9	6.7
VARBL	2.2	.5	.0									2.7	2.4
CALM												5.0	
	25.9	29.0	24.6	13.1	2.0	.3	.0	.0				100.0	6.2

TOTAL NUMBER OF OBSERVATIONS 82790

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

JAN
MONTH

ALL WEATHER
CLASS

ALL
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.9	.3	.2	.0								1.5	3.5
NNE	2.2	1.7	.8	.6								5.4	5.1
NE	4.7	4.2	1.0	.3	.1							10.2	4.3
ENE	4.2	3.9	.8	.1	.0							9.0	3.9
E	3.8	3.8	.8	.1								8.4	3.9
ESE	1.5	.9	.2									2.6	3.4
SE	.9	.2	.0	.0								1.1	2.7
SSE	1.1	.2										1.3	2.2
S	3.7	3.8	3.2	.7	.0							11.5	5.4
SSW	2.2	4.1	6.0	3.8	.5	.1						16.8	8.1
SW	1.4	2.5	3.2	3.5	1.0	.3	.0					11.9	9.6
WSW	1.1	1.1	1.6	2.0	.4	.1	.0					6.3	9.0
W	.5	.6	1.0	.8	.3	.2	.0					3.3	10.0
WNW	.2	.5	.6	.3	.1							1.7	8.3
NW	.2	.3	.5	.5	.0							1.5	8.5
NNW	.1	.1	.2	.0								.4	6.1
VARBL	1.1	.1										1.2	1.8
CALM												6.0	
	29.8	28.4	20.1	12.6	2.5	.6	.1					100.0	5.9

TOTAL NUMBER OF OBSERVATIONS

7171

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 FEB
STATION STAT. ON NAME YEARS MONTH
ALL WEATHER ALL
CLAS NORTH
CORRECTION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.1	1.1	.7	.2								3.2	5.0
NNE	2.6	3.8	3.8	2.2	.1							12.5	6.9
NE	3.8	6.1	3.2	.7								13.8	5.3
ENE	3.2	3.2	1.0	.1								7.5	4.2
E	2.8	2.1	.6	.0								5.6	3.8
ESE	1.5	.7	.2	.0								2.4	3.3
SE	.8	.3	.1									1.1	2.7
SSE	.8	.2	.1	.0								1.1	3.1
S	2.8	2.4	2.0	.6	.0							7.8	5.4
SSW	2.0	3.0	4.2	3.4	.4	.0						13.1	8.2
SW	1.5	2.0	2.5	3.6	.6	.3	.0					10.4	9.5
WSW	1.2	1.5	1.4	1.2	.4	.1	.0					5.8	8.3
W	.4	.9	1.0	.9	.4	.1	.0					3.9	9.9
WNW	.4	.8	.9	.4	.1	.0						2.5	7.7
NW	.3	.6	.8	.2								1.8	7.1
NNW	.3	.5	.4	.1								1.3	5.8
VARBL	1.2	.1										1.3	1.9
CALM												4.8	
	26.8	29.3	22.6	13.8	2.2	.5	.1					100.0	6.2

TOTAL NUMBER OF OBSERVATIONS 6492

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 67-76

HAZ

MONTH

ALL WEATHER

CLAS

ALL

HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.9	1.3	.7	.1								3.1	5.1
NNE	1.9	3.2	4.5	3.4	.3	.0						3.3	8.1
NE	3.3	5.8	4.0	1.9	.2							15.1	6.2
ENE	2.4	1.8	1.5	.3								6.0	4.9
E	1.9	1.6	1.1	.0								4.6	4.5
ESE	.7	.5	.4									1.6	4.2
SE	.6	.2	.2	.0								1.1	3.7
SSE	.7	.3	.1	.0								1.1	3.4
S	2.3	2.4	1.7	.6	.0							6.9	5.5
SSW	1.7	3.2	3.5	2.6	.3							11.3	7.9
SW	1.1	2.1	3.0	3.6	.9	.2	.0					10.9	9.9
WSW	.8	1.2	1.8	2.1	.9	.2	.0					7.0	10.6
W	.5	.9	1.2	1.6	.5	.1	.0					4.7	10.0
WNW	.2	.8	1.2	.8	.1		.0					3.1	8.7
NW	.1	.7	1.2	.9	.0	.0						3.1	8.8
NNW	.2	.6	.6	.5	.0							1.9	8.0
VARBL	1.4	.2	.0									1.6	2.3
CALM												3.6	
	20.6	26.9	26.6	18.4	3.3	.5	.1					100.0	7.1

TOTAL NUMBER OF OBSERVATIONS

7353

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS APR NORTH
ALL WEATHER CLASS ALL HOURS (L.S.T.)
CONDITION

SPEED (KNTS) DIR.	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	≥56	%	MEAN WIND SPEED
N	1.1	2.1	.9	.4	.1							4.6	5.8
NNE	1.6	3.5	4.8	3.7	.3							13.9	8.2
NE	3.1	4.8	3.7	2.3	.1							14.1	6.6
NNE	2.4	1.8	.9	.4								5.6	4.8
E	2.0	1.3	.8	.1								4.2	4.2
ESE	.9	.6	.3	.1								1.9	4.2
SE	.5	.4	.1	.0								1.0	4.0
SSE	.7	.3	.1									1.1	3.2
S	1.5	1.6	1.3	.4								4.8	5.5
SSW	1.1	2.0	3.4	2.2	.1							8.8	8.0
SW	.7	1.4	3.2	3.0	.9	.2						9.3	10.2
WSW	.7	1.2	1.6	1.9	.8	.2						6.4	10.2
W	.5	1.1	1.8	1.4	.3	.0						5.1	8.9
WNW	.3	1.3	1.7	1.2	.1							4.5	8.2
NW	.3	1.0	2.0	1.1	.1	.0						4.4	8.7
NNW	.2	1.0	1.3	.7	.0							3.6	7.6
VARBL	2.0	.6	.0									2.5	2.6
CALM												4.2	
	19.9	26.1	27.9	18.7	2.8	.4						100.0	7.1

TOTAL NUMBER OF OBSERVATIONS 6765

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

MAY
MONTH

ALL WEATHER
CLASS

ALL
HOURS (L & T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.1	1.4	1.0	.2								3.7	5.5
NNE	1.8	2.8	3.2	1.1	.1	.0						9.0	6.7
NE	3.8	4.7	2.6	.9	.1							12.0	5.5
ENE	2.6	2.5	1.1	.2								6.4	4.7
E	2.4	1.8	1.2	.2								5.6	4.6
ESE	1.0	.9	.5	.2								2.6	4.9
SE	.5	.3	.2									1.1	4.1
SSE	1.1	.4	.1									1.6	3.1
S	2.3	2.7	1.7	.3	.0							7.0	5.1
SSW	1.6	3.5	3.6	1.2	.1							9.9	6.7
SW	1.1	2.1	3.5	2.2	.4	.0	.0					9.3	8.5
WSW	1.0	2.0	2.2	1.5	.6	.1						7.3	8.6
W	.5	2.0	2.1	1.6	.2	.0						6.5	8.5
WNW	.2	1.1	1.7	.8	.0							3.8	8.1
NW	.2	.9	1.5	.6	.0							3.3	8.0
NNW	.3	.9	.9	.4								2.5	7.3
VARBL	3.2	1.1										4.3	2.6
CALM												4.2	
	24.7	30.9	27.2	11.3	1.5	.2	.0					100.0	6.1

TOTAL NUMBER OF OBSERVATIONS 6972

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

JUN
MONTH

ALL WEATHER
CLIM

ALL
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.2	2.0	1.6	.4	.0							5.3	6.0
NNE	1.8	3.8	3.8	2.7	.1							12.2	7.4
NE	3.3	4.5	3.3	.9	.0							11.9	5.7
ENE	2.6	2.4	1.4	.3								6.7	4.8
E	2.4	1.3	.7	.1								4.4	4.0
ESE	.9	.7	.1	.0								1.8	3.7
SE	.5	.4	.1									1.0	3.4
SSE	.8	.4	.1									1.3	3.4
S	2.2	2.1	1.2	.2								5.7	4.7
SSW	1.6	2.9	3.1	1.0	.0							8.7	6.6
SW	1.3	2.1	3.5	1.5	.2							8.6	7.9
WSW	.9	2.0	1.9	1.7	.5	.0						7.1	8.4
W	.5	2.0	2.4	1.4	.3	.0						6.6	8.3
WNW	.1	1.1	1.4	.5	.0							3.1	7.7
NW	.3	1.0	1.6	.8								3.7	8.0
NNW	.5	1.2	1.0	.3								3.0	7.1
VARBL	3.0	1.1										4.1	2.6
CALM												4.9	
	24.0	30.8	27.2	11.9	1.2	.0						100.0	6.1

TOTAL NUMBER OF OBSERVATIONS

6763

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

JUL
MONTH

ALL WEATHER
CLASS

ALL
MOUSE (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.9	1.5	.9	.1								3.3	5.1
NNE	1.7	2.8	2.5	.5								7.5	6.0
NE	3.4	4.2	2.0	.5								10.1	5.0
ENE	3.0	2.5	.7	.1								6.3	4.0
E	2.1	1.4	.6									4.1	3.9
ESE	1.0	.6	.3									1.8	3.9
SE	.5	.5	.1									1.1	3.9
SSE	.9	.4	.1									1.4	3.3
S	2.8	2.5	1.2	.2								6.7	4.6
SSW	2.1	3.3	3.3	1.2	.0	.0						10.0	6.5
SW	1.3	2.4	3.5	2.1	.3	.0						9.7	8.1
WSW	1.0	2.1	2.3	1.8	.5	.0						7.7	8.4
W	.9	2.1	2.4	1.4	.3	.1	.0					7.2	8.2
WNW	.4	1.4	2.2	.6	.1							4.6	7.6
NW	.4	1.4	2.1	.7								4.6	7.5
NNW	.8	1.3	1.4	.4								3.9	6.4
VARBL	3.1	1.6	.0									4.8	2.9
CALM												5.2	
	26.2	31.9	25.6	9.7	1.2	.2	.0					100.0	5.7

TOTAL NUMBER OF OBSERVATIONS

6841

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

AUG
MONTH

ALL WEATHER
CLASS

ALL
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 53	≥ 56	%	MEAN WIND SPEED
N	.9	1.3	.7	.1	.0							3.1	5.2
NNE	2.5	3.5	3.4	.7								10.1	5.9
NE	4.7	6.5	3.1	.3								14.6	4.9
ENE	3.6	3.0	1.3	.1								8.0	4.3
E	2.9	2.1	1.2	.2								6.3	4.4
ESE	1.3	.9	.5	.1								2.8	4.2
SE	.6	.5	.3	.0								1.4	4.5
SSE	1.1	.4	.2									1.7	3.4
S	2.2	2.4	1.5	.2	.0							6.4	5.0
SSW	1.7	3.4	3.6	1.1	.0							9.8	6.6
SW	1.2	2.4	3.7	1.9	.1							9.4	7.7
WSW	1.0	1.3	1.9	1.7	.3							6.1	8.5
W	.5	.9	1.3	1.1	.2	.0						4.0	8.5
WNW	.2	.8	1.1	.3								2.4	7.4
NW	.4	1.0	1.2	.3	.0							2.9	6.6
NNW	.4	.6	.6	.1								1.7	5.9
VARBL	3.5	1.1										4.6	2.5
CALM												4.7	
	28.8	32.1	25.6	8.1	.7	.0						100.0	5.5

TOTAL NUMBER OF OBSERVATIONS

6996

2
DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/TAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

SEP
MONTH

ALL WEATHER
CLASS

ALL
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.1	.9	.4	.1								2.5	4.3
NNE	2.3	3.3	2.5	.4	.0							8.6	5.6
NE	5.1	5.0	2.5	.3								12.8	4.8
ENE	4.5	2.9	.8	.1								8.2	3.6
E	3.2	1.5	.4									5.1	3.2
ESE	1.4	.3	.3									2.1	3.3
SE	.9	.3	.1									1.4	3.1
SSE	1.1	.5	.1	.0								1.7	3.0
S	2.8	3.7	3.2	1.2	.0							10.9	6.1
SSW	2.1	4.2	1.9	2.5	.1							13.9	7.3
SW	1.0	2.9	3.2	2.4	.4	.0						9.9	8.4
WSW	1.3	1.2	1.6	1.4	.4	.0						5.9	8.1
W	.4	.7	.8	.8	.1							2.7	8.2
WNW	.1	.5	.4	.3	.0							1.4	7.9
NW	.3	.3	.6	.1	.0							1.5	6.6
NNW	.4	.6	.3	.1								1.4	5.4
VARBL	2.9	.5										3.3	2.2
CALM												6.8	
	30.8	29.6	21.9	9.7	1.1	.0						100.0	5.4

TOTAL NUMBER OF OBSERVATIONS

6755

2
DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76
STATION NAME YEARS
ALL WEATHER CLASS
CONDITION
HCF MONTH
ALL HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	.4	.8	.1	.0							1.9	5.9
NNE	1.6	1.7	1.5	.7	.1							5.7	6.2
NE	4.0	4.7	2.1	.6								11.5	4.9
ENE	4.1	3.4	.8	.1								8.4	3.9
E	3.2	2.4	.7									6.3	3.7
ESE	1.2	.5	.3	.0								1.9	3.7
SE	.8	.2	.1	.0								1.1	2.8
SSE	.9	.3	.1	.0								1.3	3.0
S	3.3	3.2	2.1	.5								9.1	5.1
SSW	2.7	4.4	5.5	2.4	.2							15.3	7.0
SW	2.3	3.3	3.9	3.2	.6	.0	.0	.0				13.3	8.2
WSW	1.5	1.6	1.8	1.6	.5	.1						7.0	8.1
W	.6	1.0	1.1	1.2	.3	.0						4.1	9.0
WNW	.2	.6	.9	.4	.1							2.3	8.0
NW	.2	.5	.5	.1		.0						1.4	7.0
NNW	.3	.3	.3	.1		.0						.9	6.5
VARBL	1.9	.1										2.1	1.9
CALM												6.5	
	29.4	28.7	22.3	11.2	1.7	.2	.0	.0				100.0	5.7

TOTAL NUMBER OF OBSERVATIONS 7022

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

NOV
MONTH

ALL WEATHER
CLASS

ALL
NUMBER (L T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.3	.7	.4	.3								2.7	4.8
NNE	2.0	2.1	2.1	1.0	.2							7.4	6.5
NE	3.4	3.1	1.1	.4								8.1	4.6
ENE	3.2	1.8	.6	.0								5.6	3.6
E	2.9	1.4	.5	.0								4.9	3.5
ESE	1.5	.7	.0									2.2	2.9
SE	.7	.2	.0									1.0	2.6
SSE	.9	.3	.0									1.3	2.7
S	2.9	3.5	3.3	1.4	.2							11.4	6.4
SSW	2.0	4.3	6.5	5.2	.7	.0						18.8	8.6
SW	1.3	2.6	3.8	4.9	1.5	.4	.0					14.6	10.4
WSW	1.2	1.7	2.1	1.9	.6	.1	.0					7.7	9.1
W	.5	.7	1.4	1.3	.2	.1	.0					4.3	9.5
WNW	.1	.5	.8	.3	.1							1.8	7.9
NW	.1	.4	.4	.2								1.1	6.8
NNW	.3	.4	.1	.0	.0							.8	4.8
VARBL	1.7	.1										1.8	1.8
CALM												4.7	
	26.2	24.5	23.3	17.0	3.5	.7	.1					100.0	6.7

TOTAL NUMBER OF OBSERVATIONS

6844

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

25032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS DEC MONTH

ALL WEATHER
CLASS

ALL
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7	.6	.4	.1								1.7	4.9
NNE	1.4	2.3	2.3	1.3	.0							7.3	6.8
NE	2.4	4.3	2.3	1.0	.0	.0						11.0	5.5
ENE	3.7	3.5	.9	.0								8.2	4.0
E	2.7	2.2	.3	.0								5.2	3.6
ESE	1.4	.8	.1									2.3	3.1
SE	.8	.2	.0									1.0	2.6
SSE	1.0	.3	.0									1.3	2.6
S	2.9	3.6	2.9	.6	.1	.0						10.1	5.6
SSW	1.9	5.2	7.7	4.7	.5	.0						19.9	8.2
SW	1.4	2.9	4.1	4.1	.8	.0	.0					13.4	9.1
WSW	.8	1.1	1.6	1.6	.7	.1						5.9	9.6
W	.3	.6	1.1	.8	.2	.1						3.1	9.4
WNW	.2	.3	.8	.4	.1	.0						1.7	8.5
NW	.1	.5	.8	.3	.0	.0						1.7	8.4
NNW	.3	.4	.3	.1	.0							1.0	5.6
VARBL	.9	.1										1.0	2.0
CALM												4.2	
	23.8	28.9	25.4	15.0	2.5	.2	.0					100.0	6.5

TOTAL NUMBER OF OBSERVATIONS 7116

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

JAN
MONTH

ALL WEATHER
CLASS

0000-0200
HOURS (L.S.T.)

CORRECTION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.1	.2	.1									1.5	2.8
NNE	2.6	2.0	1.1	.4								6.2	4.9
NE	6.3	4.2	.7	.2	.1							11.5	3.9
ENE	4.4	3.9	.7									9.0	3.9
E	3.7	3.0	.8	.1								7.6	3.8
ESE	1.6	.6										2.1	2.5
SE	1.1	.1	.1									1.3	3.0
SSE	1.1	.3										1.5	2.5
S	4.4	3.6	2.9	.6								11.5	5.0
SSW	2.4	3.9	2.2	3.7	.9							16.1	8.4
SW	1.5	2.6	3.0	2.9	1.0	.6						11.6	9.9
WSW	.8	1.6	1.7	1.5	.2							5.7	8.3
W	.4	.4	.8	1.0	.2							2.9	9.6
WNW		.3	.4	.1	.2							1.1	9.6
NW	.2	.2	.3	.1	.1							1.0	7.7
NNW		.1										.1	4.0
VARBL	.7	.1										.8	2.6
CALM												8.4	
	32.3	27.3	17.9	10.7	2.8	.6						107.0	5.6

TOTAL NUMBER OF OBSERVATIONS

889

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

JAN
MONTH

ALL WEATHER
CLASS

0000-0500
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.3	.1	.2									.7	5.0
NNE	2.3	1.7	1.3	.6								5.9	5.3
NE	6.1	5.9	.4	.3	.1							12.9	3.9
ENE	5.3	3.5	.7									9.5	3.4
E	3.0	2.7	.8									6.5	3.9
ESE	1.7	.4	.1									2.2	3.0
SE	1.1	.2										1.3	2.3
SSE	.7	.2										.9	2.5
S	2.6	4.6	4.3	.4								11.9	5.8
SSW	2.4	3.0	4.7	4.3	.7							15.1	8.4
SW	1.4	2.8	2.9	3.6	.7	.6						11.9	9.7
WSW	1.4	1.2	1.2	1.8	.3	.2	.1					6.3	9.0
W	.2	.6	.7	.3	.2							2.0	8.9
WNW	.2	.3	.4	.2	.2							1.4	8.9
NW	.1	.1	.2	.3								.8	9.3
NNW	.1		.2									.3	6.3
VARBL	1.1	.1										1.2	1.4
CALM												9.0	
	30.3	27.4	18.3	11.9	2.2	.8	.1					100.0	5.7

TOTAL NUMBER OF OBSERVATIONS

898

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

JAN
MONTH

ALL WEATHER
CLASS

0600-0800
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.4	.3										.8	2.9
NNE	1.7	1.7	.6	1.1								5.0	6.1
NE	5.9	3.4	.9	.6								10.8	4.0
ENE	6.5	4.1	.6		.1							11.2	3.5
E	4.1	2.9	.4									7.5	3.6
ESE	2.4	.4	.1									3.0	2.6
SE	1.0											1.0	1.6
SSE	1.2	.2										1.4	2.5
S	3.3	3.4	4.1	.6								11.5	5.7
SSW	2.3	3.6	6.9	3.9	.7	.2						17.6	8.4
SW	.7	2.9	2.6	2.6	1.3							10.0	9.7
WSW	1.2	1.0	.9	1.4	.7	.1						5.3	8.9
W	.4	.8	1.1	.6	.2	.2						3.3	9.5
WNW	.1	.3	.4	.3	.1							1.3	9.3
NW	.1	.1	.3	.6								1.1	9.6
NNW	.2											.2	2.5
VARBL	1.0	.1										1.1	1.9
CALM												7.8	
	32.7	25.4	18.9	11.6	3.1	.6						100.0	5.7

TOTAL NUMBER OF OBSERVATIONS 829

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 RHEIN-MAIN APT GERMANY/FRANKFURT

67-76

JAN

ALL WEATHER

0900-1100
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	.1	.6									1.2	5.1
NNE	1.6	.9	.9	1.0								4.3	6.6
NE	4.0	3.7	1.9	.1	.2							9.9	4.8
ENE	3.2	4.1	.8	.1								8.2	4.2
E	3.5	4.0	1.4	.1								9.1	4.3
ESE	1.7	1.1	.2									3.0	3.6
SE	1.1	.2										1.3	2.4
SSE	1.4											1.4	1.4
S	3.8	2.4	3.3	1.2								10.7	6.1
SSW	2.3	5.6	6.9	3.3	.4	.1						18.7	7.7
SW	2.1	2.2	3.8	4.0	1.2	.3						13.6	9.2
WSW	1.3	1.0	.8	3.1	.3							6.5	9.1
W	.4	.7	1.2	.6	.3	.3	.1					3.7	10.5
WNW		.3	.4	.6	.1							1.4	10.1
NW		.4	.4	.7								1.6	9.2
NNW			.2									.2	9.0
VARBL	1.2	.1										1.3	1.8
CALM												3.8	
	28.2	26.9	22.8	14.7	2.7	.8	.1					100.0	6.4

TOTAL NUMBER OF OBSERVATIONS

903

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 JAN
STATION MONTH
ALL WEATHER 1200-1400
CLAS TIME (L.S.T.)
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 5	≥ 56	%	MEAN WIND SPEED
N	1.0	.7	.2	.2								2.1	4.5
NNE	1.5	1.2	1.3	.7								4.7	6.1
NE	2.1	4.0	1.1	.4	.2							7.9	5.4
ENE	1.7	3.5	1.0	.1								6.2	4.9
E	2.6	5.0	1.8	.2								9.6	4.9
ESE	1.7	1.9	.9									4.5	4.3
SE	.7	.4		.1								1.2	3.4
SSE	1.1	.1										1.2	1.9
S	3.1	2.3	2.7	.2								8.4	5.1
SSW	2.0	4.8	6.6	3.7	.7							17.7	8.0
SW	1.1	2.5	4.7	4.8	1.2	.2	.1					14.6	10.2
WSW	1.2	1.7	1.6	3.3	.4							8.3	7.2
W	.4	.6	1.0	.9	.6	.2						3.7	11.2
WSW	.2	.4	.2	.3	.2							1.6	9.6
W	.1	.1	.9	1.3	.2							2.7	10.9
NNW		.2	.3									.6	7.4
VARBL	1.3	.1										1.5	2.1
CALM												3.6	
	21.9	29.6	24.4	16.4	3.6	.4	.1					100.0	6.9

TOTAL NUMBER OF OBSERVATIONS 896

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

JAN
MONTH

ALL WEATHER
CLASS

1500-1700
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.8	.4	.1	.1								2.5	3.2
NNE	2.8	2.0	.6	.3								5.7	4.6
NE	2.6	3.4	.7	.1								6.7	4.3
ENE	3.1	3.0	1.5	.3								8.0	4.7
E	5.1	5.3	1.0									11.4	3.9
ESE	.8	1.1	.3									2.2	4.3
SE	.3	.1	.1									.6	3.4
SSE	1.0											1.0	1.9
S	3.4	4.2	3.0	.7								11.2	5.5
SSW	1.9	4.8	4.7	3.7								15.2	7.6
SW	1.7	2.7	3.9	4.7	.7	.2						13.9	9.5
WSW	1.0	.7	2.0	2.2	.2	.2						6.4	9.4
W	1.1	.3	1.1	.8	.2	.3	.1					4.0	9.7
WNW	.3	.9	1.6	.2								3.0	7.0
NW	.1	.7	1.0	.4								2.2	7.7
NNW	.2	.3	.3	.2								1.1	6.9
VARIABLE	.9											.9	2.0
CALM												3.7	
	28.2	36.0	22.0	13.9	1.1	.8	.1					100.0	6.1

TOTAL NUMBER OF OBSERVATIONS

889

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

JAN
MONTH

1800-2000
HOURS (L.S.T.)

ALL WEATHER
CLASS

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.2	.4										1.7	2.9
NNE	3.2	1.3	.6									5.1	3.5
NE	4.7	4.5	.9	.2	.1							10.4	4.4
ENE	4.5	5.4	.7	.1								10.6	3.9
E	4.8	3.9										8.7	3.3
ESE	.7	.3										1.0	2.7
SE	.7	.2										.9	2.5
SSE	1.0	.2										1.2	2.6
S	4.5	4.5	2.5	1.0	.1							12.3	5.4
SSW	1.7	3.9	6.1	4.3	.2							16.3	8.2
SW	1.8	2.7	2.6	3.1	1.1							11.3	8.9
WSW	.9	.8	2.2	1.9	.4							6.2	9.0
W	.2	.8	1.0	.6	.2	.2						3.0	10.2
WNW	.4	.4	.9									1.8	6.1
NW	.3	.7	.4	.1								1.6	6.2
NNW	.3	.1	.1									.6	4.6
VARBL	2.0	.1										2.1	1.7
CALM												5.4	
	32.7	30.2	17.9	11.4	2.2	.2						100.0	5.6

TOTAL NUMBER OF OBSERVATIONS

897

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-74
YEARS

JAN
MONTH

ALL WEATHER
CLASS

2100-2300
HOURS (L.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.0	.3										1.3	2.5
NNE	2.3	3.0	.3	.4								6.1	4.4
NE	6.0	4.2	1.1	.2	.1							11.7	4.0
ENE	4.7	3.8	.4									8.9	3.6
E	3.2	3.8	.1									7.1	3.5
ESE	1.3	.9	.2									2.4	3.4
SE	.8	.6										1.3	3.0
SSE	1.1	.2										1.3	2.1
S	5.0	5.7	2.9	.8								14.3	5.0
SSW	2.6	3.4	7.0	3.3	.8	.2						17.3	8.3
SW	1.2	1.9	2.4	2.2	.6	.2						8.6	9.2
WSW	.9	.9	2.2	1.1	.2	.1	.1					5.6	9.0
W	.6	.8	.9	1.3	.4							4.0	9.9
WNW		.8	.6	.4								1.8	7.8
NW	.3	.3	.2	.1								1.0	5.6
NNW	.1	.2										.3	4.3
VARBL	.7											.7	1.7
CALM												6.2	
	31.8	30.8	18.4	10.0	2.1	.6	.1					100.0	5.6

TOTAL NUMBER OF OBSERVATIONS 900

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS
FEB MONTH
ALL WEATHER CLASS
0000-0000 HOURS (L.S.T.)
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	1.4	.5									2.5	4.8
NNE	3.5	4.6	3.2	1.5								12.7	5.9
NE	5.8	8.8	2.7	.2								17.6	4.6
ENE	5.3	3.2	.6									9.2	3.4
E	2.6	.7										3.3	2.5
ESE	1.4											1.4	1.5
SE	.9	.1										1.0	2.3
SSE	.4	.1	.2									.7	4.0
S	3.2	3.2	1.7	.6								8.8	5.1
SSW	2.6	3.6	4.7	3.3	.7	.1						15.1	8.1
SW	1.6	1.5	2.0	4.6	.6	.1						10.4	9.7
WSW	.9	1.1	.9	.7	.2							3.8	7.2
W	.2	.9	.6	.5								2.2	6.8
WNW	.4	1.2	.5	.5	.1							2.7	6.8
NW	.2	.7	.2									1.2	5.0
NNW	.1	.1	.1									.4	5.3
VARBL	.9											.9	1.4
CALM												6.1	
	30.6	31.3	18.1	12.0	1.7	.2						100.0	5.5

TOTAL NUMBER OF OBSERVATIONS 808

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

FEB
MONTH

ALL WEATHER
CLASS

0300-0500
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7	.7	.5	.1								2.1	5.2
NNE	3.1	3.0	4.5	1.5								12.0	6.5
NE	5.9	7.9	2.6	.1								16.6	4.4
ENE	5.0	3.1	.5	.1								8.7	3.4
E	2.7	1.0	.2									4.0	3.3
ESE	1.4	.2										1.6	1.9
SE	.9	.2										1.1	2.2
SSE	.6	.4	.1									1.1	3.7
S	2.6	2.5	2.5	1.0								8.5	5.6
SSW	3.1	4.2	4.0	2.6	.1							14.0	6.8
SW	1.0	1.9	1.6	3.8	.9	.5						9.7	10.7
WSW	1.2	1.2	1.4	.5	.2	.2						4.8	7.7
W		.9	.9	.2	.2							2.2	8.6
WNW	.2	.2	.2	.2	.1	.1						1.2	10.0
NW		.4	1.2	.4								2.0	8.3
NNW		.9	.1									1.0	5.1
VARBL	1.0	.1										1.1	2.6
CALM												8.3	
	29.5	28.8	20.3	10.6	1.6	.9						100.0	5.5

TOTAL NUMBER OF OBSERVATION 808

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS FEB NORTH
0600-0800 HOURS (L.S.T.)

ALL WEATHER
CLAS

CONDITION

SPED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.1	1.0	.4									2.5	4.0
NNE	2.6	3.3	2.0	2.1	.1							10.1	6.6
NE	6.1	7.7	3.1	.4								17.2	4.7
ENE	4.3	4.1	1.0									9.4	3.8
E	4.4	1.5	.2									6.2	2.6
ESE	1.1	.4										1.5	2.8
SE	1.1											1.1	1.3
SSE	.6	.1										.7	2.0
S	2.8	2.5	2.7	.2								8.1	5.3
SSW	2.2	3.7	6.1	3.3	.2							15.6	7.8
SW	1.9	2.6	2.3	3.0	.2	.4						10.4	8.4
WSW	.9	.7	1.4	.6	.2							3.8	7.8
W	.7	.6	.6	.2	.5	.1	.1					3.0	9.9
WNW	.2	.5	.9	.2	.2							2.1	8.3
NW	.1	.1	.5	.2								1.0	8.8
NNW	.5	.2	.2									1.0	4.0
VARBL	.6											.6	1.6
CALM												5.6	
	31.4	29.0	21.4	10.4	1.6	.5	.1					100.0	5.6

TOTAL NUMBER OF OBSERVATIONS 809

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

FEB
MONTH

ALL WEATHER
CLASS

0900-1100
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.4	1.0	.6	.2								3.2	4.5
NNE	1.1	3.5	3.2	3.0	.4							11.1	8.2
NE	2.1	3.6	5.2	.6								11.5	6.3
ENE	2.3	4.2	1.4	.6								8.5	5.1
E	3.7	3.8	1.5	.1								9.1	4.3
ESE	1.7	.9	.4									3.0	3.6
SE	.5	.4										.9	2.6
SSE	1.2	.2										1.5	2.3
S	2.5	2.0	2.1	.9								7.4	5.9
SSW	1.5	3.7	5.2	5.4	.5							16.3	8.8
SW	1.5	2.6	3.5	2.8	.2	.4	.1					11.1	8.7
WSW	1.2	1.5	1.4	.7	.2							5.1	7.2
W	.2	.9	.9	1.7	1.0							4.7	11.5
WNW	.1	.5	.7	.4	.1							1.9	8.1
NW		.1	.5	.2								.9	9.7
NNW	.5		.4	.2								1.1	6.0
VARBL	.9											.9	1.4
CALM												2.0	
	22.5	28.8	26.8	17.0	2.5	.4	.1					160.0	6.8

TOTAL NUMBER OF OBSERVATIONS 810

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

FEB
MONTH

ALL WEATHER
CLASS

1200-1400
HOURS (LST)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	1.0	1.7	.6								4.0	7.0
NNE	1.1	3.0	5.3	2.7	.2							12.4	8.2
NE	.4	4.0	4.0	1.1								9.4	7.2
ENE	1.2	2.1	1.6	.2								5.2	5.5
E	2.7	2.9	2.2									7.8	5.0
ESE	.6	1.0	.7	.1								2.5	5.9
SE	.4	.2	.2									.9	4.1
SSE	.5	.1	.1	.1								.9	4.6
S	2.1	2.1	1.4	.5	.1							6.2	5.5
SSW	1.0	2.0	4.1	3.7	.5							11.3	9.0
SW	.9	2.5	3.8	3.3	.7	.2	.1					11.6	9.9
WSW	1.0	2.1	1.6	2.7	1.4	.1	.1					9.0	10.6
W	.9	.7	1.2	1.9	.6	.4	.1					5.8	11.1
WNW	.4	.7	1.2	.7	.2							3.3	9.2
NW	.6	.4	1.4	.6								3.0	7.6
NNW		.6	.5	.5								1.6	8.0
VARBL	3.3	.2										3.6	2.2
CALM												1.5	
	17.7	25.7	31.2	19.0	3.8	.7	.4					100.0	7.7

TOTAL NUMBER OF OBSERVATIONS 807

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

FEB
MONTH

1500-1700
HOURS (L.S.T.)

ALL WEATHER

CLASS

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.9	1.4	1.2	.2								4.7	5.2
NNE	1.6	4.0	5.2	3.1	.1							14.0	7.7
NE	1.9	3.5	2.6	1.2								9.1	6.5
ENE	1.4	2.3	1.1	.1								4.9	5.1
E	2.1	3.7	.5	.2								6.5	4.7
ESE	2.5	1.6	.4									4.4	3.6
SE	.2	1.0										1.2	4.2
SSE	1.1	.6	.1									1.9	3.1
S	2.6	2.5	2.0	.2								7.3	5.0
SSW	1.2	1.7	2.2	2.2	.2							7.7	8.4
SW	1.4	2.5	1.5	4.3	.5	.4						10.5	10.0
WSW	1.4	1.9	1.2	3.0	.7							8.1	9.6
W	.5	1.0	1.7	1.4	.7	.2						5.6	10.6
WNW	.6	1.4	1.6	.9								4.4	7.4
NW	.4	.7	1.5	.2								2.8	7.0
NNW	.2	.9	.6	.1								1.9	6.3
VARBL	1.6											1.6	1.7
CALM												3.3	
	22.5	30.5	23.5	17.3	2.3	.6						100.0	6.8

TOTAL NUMBER OF OBSERVATIONS

810

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 67-76
STATION NAME YEARS
ALL WEATHER
CLASS
CONDITION
FEB
MONTH
1800-2000
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.6	1.6	.2	.1								3.5	4.0
NNE	3.3	4.2	3.2	2.7	.1							13.4	6.7
NE	3.7	5.6	2.4	1.2								12.9	5.4
ENE	2.8	3.7	.9									7.3	4.2
E	2.6	2.2	.1									4.9	3.3
ESE	2.1	1.2										3.3	2.7
SE	1.2	.1	.1									1.5	2.8
SSE	.7	.2		.1								1.1	3.4
S	2.6	2.7	1.7	.4								7.3	5.2
SSW	1.8	2.8	3.7	3.3	.6							12.2	8.3
SW	2.2	1.7	1.8	3.7	.2	.2						9.9	8.8
WSW	1.8	2.3	1.8	.5	.2							6.7	6.2
W	.2	.9	1.5	1.0	.1	.4						4.0	10.0
WNW	.4	1.0	1.0									2.3	6.2
NW	.6	1.1	.4	.1								2.2	5.1
NNW	.7	1.0	.6									2.3	5.1
VARBL	.6											.6	1.4
CALM												4.4	
	28.9	32.2	19.4	13.1	1.3	.6						100.0	5.9

TOTAL NUMBER OF OBSERVATIONS 819

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

7-76
YEARS

FEB
MONTH

ALL WEATHER
CLASS

2100-2300
HOURS (LST)

CONDITION

SPEED (KNTS) DIR.	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	≥56	%	MEAN WIND SPEED
N	1.1	1.1	.4	.2								2.8	4.7
NNE	4.9	4.6	3.5	1.1								14.1	5.6
NE	4.9	7.9	2.9	.7								16.4	5.0
ENE	3.0	2.9	.7									6.7	3.9
E	1.9	.7	.1									2.8	2.8
ESE	1.6	.2										1.8	2.6
SE	.9	.1	.1									1.1	2.4
SSE	1.1	.1										1.2	2.3
S	4.0	2.1	1.7	.7	.1							8.6	5.2
SSW	2.3	2.7	4.0	3.0	.6	.1						12.8	8.2
SW	1.6	.9	3.2	3.0	1.0							9.6	9.6
WSW	1.2	1.0	1.2	1.2	.1	.1						4.9	7.9
W	.7	1.1	1.0	.2	.4							3.4	7.5
WNW	.5	.9	.7	.1	.1							2.3	6.3
NW	.1	.9	.5	.1								1.6	6.5
NNW	.4	.4	.5	.1								1.3	5.8
VARBL	.9	.1										1.0	2.0
CALM												7.4	
	31.1	27.6	20.6	10.7	2.3	.2						100.0	5.6

TOTAL NUMBER OF OBSERVATIONS 821

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

MAR
MONTH

ALL WEATHER
CLASS

0000-0200
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.5	1.0	.7									2.2	5.3
NNE	2.7	3.6	6.2	2.1	.2							14.8	7.2
NE	6.2	9.0	4.4	.7	.2							20.5	5.2
ENE	3.7	1.8	.3									5.8	3.1
E	2.2	.9	.2									3.3	3.2
ESE	.7											.7	1.8
SE	.6	.1										.7	2.3
SSE	.8											.8	2.1
S	3.9	2.7	1.9	.6	.1							9.3	5.0
SSW	2.9	4.9	3.6	2.2	.1							13.6	6.6
SW	1.6	3.0	1.8	3.0	.2	.1						9.7	8.1
WSW	.7	.9	1.3	1.0	.7							4.6	9.2
W	.8	1.5	.7	1.1	.2							4.4	7.9
WNW	.1	.5	.2	.5								1.3	7.7
NW	.1	.3	.5	.5								1.5	7.7
NNW	.2	.6	.2	.3								1.4	7.0
VARBL	.7	.1										.8	1.9
CALM												4.7	
	28.3	31.2	22.0	11.9	1.8	.1						100.0	5.8

TOTAL NUMBER OF OBSERVATIONS 873

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

MAR
MONTHS

ALL WEATHER
CLASS

0300-0500
HOURS (L.A.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.1	1.0	.6									2.7	4.3
NNE	2.1	3.8	5.5	2.1	.1							13.7	7.3
NE	7.9	8.3	3.9	.8	.1							21.0	4.9
ENE	4.0	2.5	.1									6.6	3.3
E	2.0	.8										2.8	2.8
ESE	.7	.2										.11	2.1
SE	.4											.4	1.0
SSE	.9											.9	1.6
S	3.7	2.8	1.7	.3								8.5	4.7
SSW	2.4	5.2	3.6	2.2	.1							13.5	6.8
SW	2.0	1.7	2.2	3.3	.7							9.9	8.8
WSW	.2	1.2	1.5	1.3	.2							4.5	9.4
W	.4	.3	.7	1.0	.1							2.6	9.3
WNW	.2	.6	.4	.3								1.6	6.8
NW	.2	.8	.6	.3								1.9	6.8
NNW	.4	.4	.2									1.1	4.2
VARBL	1.1	.1										1.2	2.3
CALM												6.1	
	30.0	29.3	21.0	11.8	1.3							100.0	5.6

TOTAL NUMBER OF OBSERVATIONS 890

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS MAR
ALL WEATHER CLASS 0600-0800 HOURS (L.S.T.)
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.9	1.5	.8									3.1	4.9
NNE	1.8	3.2	4.1	3.5	.2							12.9	8.0
NE	4.8	8.3	3.7	1.1								17.9	5.4
ENE	4.7	2.2	1.5	.1								8.5	4.0
E	2.6	.8	.7									4.0	3.6
ESE	.8	.1	.1									1.0	2.3
SE	.9	.1										1.0	2.6
SSE	.9	.2										1.1	2.4
S	2.1	2.9	2.2	.2								7.5	5.4
SSW	1.7	5.0	4.9	2.6	.8							15.0	7.9
SW	.7	2.1	2.2	2.7	1.6	.1						9.4	10.4
WSW	.7	.8	1.6	1.3	.6	.1						5.0	9.7
W	.3	.7	.7	.6	.2							2.5	8.6
WNW	.3	.4	1.5	.2								2.5	7.4
NW		.2	.8	.2								1.2	8.5
NNW	.1	.3	.2	.6								1.2	9.5
VARBL	.9											.9	1.8
CALM												5.2	
	24.2	29.0	25.0	15.1	3.4	.2						100.0	6.4

TOTAL NUMBER OF OBSERVATIONS 893

DATA PROCESSING BRANCH
STAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35-32 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS MAR MONTH
ALL WEATHER CLASS 0900-1100 HOURS (L.S.T.)
CONDITION

SPEED (KNTS) DIR.	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	≥56	%	MEAN WIND SPEED
N	.8	1.7	1.1	.2								3.9	5.7
NNE	1.4	2.7	3.3	3.9	.5							11.7	8.8
NE	.8	4.4	4.4	2.3	.3							12.2	7.8
ENE	1.1	2.3	3.9	.8								8.0	7.0
E	1.1	3.2	2.5									6.8	5.7
ESE	.2	.2	.8									1.2	5.8
SE	.5		.2	.1								.8	5.3
SSE	.3	.3										.7	3.7
S	.5	1.0	2.2	1.1								4.8	8.1
SSW	1.5	2.5	5.7	3.7	.3							13.7	8.9
SW	.9	1.9	3.1	3.3	1.1	.5						10.8	10.5
WSW	1.6	1.0	2.3	2.0	1.1	.6						8.6	10.6
W	.2	.7	1.9	2.8	.8	.2						6.7	11.7
WNW	.1	.6	.9	.2	.1							1.9	8.2
NW		.6	1.0	1.6								3.2	10.4
NNW		.2	.5	.6								1.2	10.0
VARBL	1.5	.1										1.6	2.2
CALM												2.2	
	12.5	23.5	33.7	22.7	4.3	1.2						100.0	8.4

TOTAL NUMBER OF OBSERVATIONS 882

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

MAR
MONTH

ALL WEATHER
CLASS

1200-1400
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.5	1.9	.6	.5								3.4	6.1
NNE	.5	3.0	3.0	4.2	.7							11.3	9.7
NE	.3	3.1	4.1	3.0	.2							10.7	8.6
ENE	.3	1.1	2.4	.6								4.5	7.5
E	.3	1.3	2.6									4.5	6.8
ESE	.1	1.4	1.1									2.6	6.5
SE	.3	.3	.8	.1								1.6	6.2
SSE	.1	.1										.2	4.0
S	.9	2.2	1.1	.7	.1							5.0	6.6
SSW	.5	2.1	3.8	3.8	.7							10.7	9.8
SW	.9	1.6	2.9	4.1	1.5	.6						11.5	11.4
WSW	1.1	1.8	2.4	4.0	2.3	.7	.1					12.4	11.8
W	1.0	1.5	1.4	2.4	1.0	.1	.2					7.6	10.6
WNW	.5	.7	1.5	1.6	.2		.1					4.6	10.4
NW		.3	.9	1.6	.1							3.0	11.0
NNW	.1	.8	.7	.6	.2							2.4	9.0
VARBL	2.9	.5	.1									3.4	2.7
CALM												.5	
	10.4	23.9	29.3	27.1	7.1	1.4	.5					100.0	9.2

TOTAL NUMBER OF OBSERVATIONS

876

2
DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 MAR
STATION STATION NAME YEARS MONTH
ALL WEATHER 1500-1700
CLASS HOURS (L & T.)
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.0	1.6	.7	.5								3.8	5.6
NNE	1.6	1.6	4.5	4.9	.5	.1						13.2	9.4
NE	.5	2.8	2.6	2.9	.2							9.0	8.8
ENE	.2	1.6	2.1	.2								4.1	6.9
E	1.7	2.6	2.0	.1								6.4	5.0
ESE	1.0	1.1	.9									3.1	4.8
SE	.5	.7	.2									1.4	4.3
SSE	.7	.6	.2									1.5	4.2
S	.8	1.6	1.8	.6								4.8	6.6
SSW	.2	1.5	2.4	1.5	.3							6.0	9.1
SW	.3	2.0	5.3	4.8	.8	.1	.1					13.4	10.7
WSW	.8	1.4	1.7	3.7	2.1	.1	.1					9.9	12.0
W	.1	.8	1.7	2.8	1.0	.1						6.5	12.0
WNW	.1	.8	2.2	1.6	.2							4.9	10.0
NW	.2	1.1	2.3	1.7	.1	.1						5.6	9.3
NNW		.9	1.4	1.7								4.0	9.1
VARBL	1.4	.2										1.6	2.4
CALM												.7	
	11.3	23.0	32.0	27.0	5.3	.6	.2					100.0	8.8

TOTAL NUMBER OF OBSERVATIONS 871

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

MAR
MONTH

ALL WEATHER
CLASS

1800-2000
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.2	1.3	.4									3.0	4.2
NNE	2.0	3.4	4.7	3.9	.1							14.1	8.0
NE	2.4	3.7	3.8	2.5								12.3	6.9
ENE	2.5	1.8	1.0	.3								5.6	4.7
E	3.1	2.1	.7									5.9	3.8
ESE	1.3	.4	.2									2.0	3.2
SE	1.0	.4	.1									1.6	3.0
SSE	1.2	.9	.1	.2								2.5	4.3
S	3.5	2.2	.7	.7								7.1	4.5
SSW	1.3	2.0	1.8	2.6								7.7	8.0
SW	.7	2.0	3.8	4.0	.6	.3						11.4	10.2
WSW	.4	.9	1.7	1.8	.2							5.0	9.5
W	.4	.8	1.6	1.2	.1							4.1	8.5
WNW	.2	1.6	1.6	1.6								4.9	8.1
NW	.3	1.8	2.6	.8	.1							5.6	7.8
NNW	.3	1.1	.7									2.1	5.7
VARBL	1.5	.2										1.7	2.1
CALM												3.2	
	23.5	26.8	25.4	19.6	1.1	.3						100.0	6.7

TOTAL NUMBER OF OBSERVATIONS

893

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND DIRECTION AND SPEED (FROM HOURLY OBSERVATIONS)

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS MAR MONTH
ALL WEATHER CLIM 2100-2300 HOURS (L.G.T.)
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 5	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 53	≥ 56	%	MEAN WIND SPEED
N	1.3	.7	.6									2.5	3.8
NNE	3.0	4.0	4.8	2.5	.3							14.6	7.2
NE	3.8	6.6	4.8	1.7	.3							17.3	6.2
ENE	2.5	1.3	.8	.1								4.7	4.0
E	1.8	1.0	.2									3.1	3.5
ESE	1.0	.5										1.5	3.0
SE	.8	.2										1.0	2.3
SSE	.9	.3	.1									1.4	3.3
S	2.7	3.4	1.6	.6								8.3	5.2
SSW	2.9	2.6	2.2	2.2	.1							10.3	6.9
SW	1.4	2.6	2.6	3.8	.5							10.9	8.8
WSW	.5	1.5	2.1	1.4	.3							5.7	8.8
W	.3	1.4	1.0	.6	.2							3.5	7.7
WNW		1.1	1.6	.6								3.3	8.0
NW	.2	.5	1.4	.5								2.5	8.2
NNW	.3	.1	.6	.5								1.5	7.8
VARBL	1.4	.2										1.6	2.1
CALM												6.3	
	24.8	28.1	24.7	14.3	1.8							100.0	6.1

TOTAL NUMBER OF OBSERVATIONS 875

1
2
DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

APR
MONTH

ALL WEATHER
CLASS

0000-0200
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.2	2.2	.2	.2								3.8	4.8
NNE	3.0	7.9	6.2	1.8	.1							19.0	6.4
NE	5.7	6.8	2.4	1.2	.1							16.3	5.1
ENE	3.5	1.2	.1									4.8	2.7
E	1.8	.7										2.5	2.3
ESE	1.2	.2										1.4	2.2
SE	.2	.1	.1									.5	4.3
SSE	1.1	.4										1.4	2.3
S	2.4	1.2	1.0	.2								4.8	4.3
SSW	1.9	3.1	3.1	1.7								9.8	7.0
SW	.7	2.3	3.2	3.0	.2							9.4	9.3
WSW	.2	1.2	1.3	1.0	.2	.1						4.1	9.1
W	.1	1.2	1.1	.4	.1							2.9	7.9
WNW	.4	1.2	1.6	.2								3.3	6.8
NW	.2	1.3	1.6	.2								3.3	7.0
NNW	.1	.7	.5									1.3	6.1
VARBL	1.8											1.8	1.8
CALM												9.4	
	25.6	31.7	22.4	9.9	.8	.1						100.0	5.4

TOTAL NUMBER OF OBSERVATIONS

836

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

APR
MONTH

ALL WEATHER
CLASS

0300-0500
HOURS (L S T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.8	1.5	.4									3.6	3.5
NNE	1.6	2.8	6.2	2.6	.2							13.5	8.0
NE	8.6	8.5	1.6	1.2								19.9	4.5
ENE	5.4	2.0										7.4	2.9
E	3.2	.6										3.8	2.2
ESE	.9	.1										1.1	2.1
SE	.4											.4	1.3
SSE	.7	.1										.8	2.0
S	3.2	2.8	.9	.2								7.2	4.3
SSW	1.4	2.0	4.9	2.0	.1							10.5	7.7
SW	.9	1.5	3.4	2.6	.5	.1						9.0	9.3
WSW	.8	1.2	.9	.4	.2							3.5	6.9
W	.7	.8	1.3	.7	.1							3.6	7.5
WNW	.2	1.5	1.2	.7								3.6	7.5
NW	.4	.4	.8	.2								1.8	6.9
NNW	.6	.6	.4									1.5	5.1
VARBL	.5											.5	1.8
CALM												8.3	
	31.3	26.4	22.1	10.6	1.2	.1						100.0	5.4

TOTAL NUMBER OF OBSERVATIONS 851

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS APR MONTH
0600-0800 HOURS (L.S.T.)

ALL WEATHER
CLAS

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	.6	.7		.1							2.0	6.1
NNE	1.9	3.1	5.5	5.1	.3							15.9	8.5
NE	4.1	6.7	5.1	2.2								18.1	6.1
ENE	4.1	2.0	.8	.1								7.0	3.8
E	2.3	1.2	.5									3.9	3.5
ESE	.8	.1										.9	1.9
SE													
SSE	.6	.1										.7	2.7
S	1.6	1.2	1.0	.2								4.1	4.7
SSW	.8	2.8	5.0	3.7	.1							12.4	8.4
SW	1.0	1.9	4.1	3.2	.6	.2						11.0	9.3
WSW	.9	1.0	1.2	1.6	.1							4.9	8.5
W	1.3	.9	.9	.6	.1							3.8	6.4
WNW	.2	.9	1.5	.8								3.5	7.7
NW	.6	.8	1.4	.3								3.1	7.1
NNW	.2	.7	1.0									2.0	6.5
VARBL	1.2	.1										1.3	1.6
CALM												5.5	
	22.2	24.1	28.7	18.0	1.4	.2						100.0	6.6

TOTAL NUMBER OF OBSERVATIONS 862

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS APR MONTH
ALL WEATHER CLASS 0900-1100 HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.3	1.8	1.2	.5	.4							5.0	6.7
NNE	.9	2.5	6.2	4.3	.4							14.3	9.3
NE	.5	2.0	4.6	3.2								10.2	9.1
ENE	1.2	1.6	1.6	.4								4.8	6.2
E	1.4	2.2	1.8	.1								5.5	5.3
ESE	.5	.5	.6									1.5	4.9
SE	.1											.1	3.0
SSE	.4	.2	.1									.7	4.5
S	.6	1.1	1.2	.4								3.2	6.4
SSW	.8	1.8	3.8	2.9	.1							9.4	8.7
SW	.7	1.5	3.4	4.5	2.1	.4						12.6	11.5
WSW	1.4	.8	1.2	2.3	1.5	.2						7.5	10.8
W	.7	1.3	2.0	1.3	.5							5.8	8.9
WNW	.2	1.3	1.8	2.0	.4							5.6	9.5
NW		.7	1.6	1.6		.1						4.1	10.1
NNW	.5	1.1	.6	.4								2.5	6.4
VARBL	5.0	1.5										6.6	2.5
CALM												.6	
	16.2	21.8	31.6	23.8	5.3	.7						100.0	8.4

TOTAL NUMBER OF OBSERVATIONS 852

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MA:

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APF GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

APR
MONTH

ALL WEATHER
CLASS

1200-1400
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.4	2.1	.8	1.2	.4							5.5	7.9
NNE	.5	2.6	3.5	5.3	.6							11.9	10.1
NE	.4	1.2	3.6	4.6	.4							10.1	10.0
ENE	.5	1.4	1.4	1.2								4.6	8.1
E	.4	1.0	1.8	.1								3.2	6.6
ESE	.1	.6	.4	.6								1.7	8.0
SE		1.0	.5	.1								1.6	6.5
SSE	.5	.2	.2									1.0	4.3
S	.2	.8	1.4	.7								3.2	8.0
SSW		1.2	2.9	2.8	.1							6.9	9.9
SW	.5	1.3	3.4	3.6	1.9	.2						10.9	11.8
WSW	.6	1.6	2.4	3.5	2.0	.2						10.3	11.7
W	.1	1.3	3.4	2.9	.7	.4						8.7	10.8
WNW	.6	.8	2.0	1.8								5.5	8.3
NW	.1	.5	.7	2.0	.2							4.6	10.4
NNW	.4	1.0	.8	1.1	.1							4.3	9.1
VARBL	3.5	1.9	.1									5.5	3.3
CALM												.6	
	8.9	20.6	31.3	31.4	6.5	.8						100.0	9.4

TOTAL NUMBER OF OBSERVATIONS

835

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY//FRANKFURT
STATION NAME

67-76
YEARS

APR
MONTH

ALL WEATHER
CLASS

1500-1700
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7	1.9	1.8	.4								4.7	6.4
NNE	.2	2.1	3.1	4.9	.4							10.7	10.2
NE	.1	1.5	4.2	3.4	.7							10.0	10.0
ENE	.4	1.5	2.1	.9								4.9	7.8
E	.4	1.4	2.1	.2								4.1	6.8
ESE	.9	1.9	1.1	.1								4.0	5.3
SE	.4	1.4	.2									2.0	4.9
SSE	.1	.7	.1									.9	5.0
S	.7	1.6	1.4	.7								4.5	7.2
SSW	.5	1.8	1.8	2.4								6.4	8.9
SW	.2	1.1	2.4	2.8	.8	.4						7.6	11.1
WSW	.1	1.2	3.1	3.4	1.4	.4						9.5	11.9
W	.4	1.1	2.0	3.4	.6							7.4	10.5
WNW		1.6	1.9	2.5	.2							6.2	9.8
NW		1.1	2.9	2.5	.4							6.8	10.2
NNW	.5	1.4	2.5	2.8	.1							7.3	9.2
VARBL	1.6	.7										2.4	3.2
CALM												.5	
	7.2	24.0	32.6	30.5	4.6	.7						100.0	9.1

TOTAL NUMBER OF OBSERVATIONS

850

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

APR
MONTH

ALL WEATHER
CLASS

1800-2000
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.5	3.2	1.4	1.0								7.1	5.8
NNE	.6	3.0	2.9	3.3	.1							9.9	8.8
NE	1.3	3.7	4.6	2.0								11.6	7.4
ENE	2.0	2.9	1.1	.4								6.3	4.9
E	4.8	2.5	.4									7.6	3.3
ESE	1.5	.8	.2									2.6	3.3
SE	1.9	.2	.1									2.3	2.7
SSE	1.2	.6										1.8	3.0
S	1.5	2.6	1.8	.4								6.3	5.5
SSW	1.5	1.3	2.5	.7								6.1	6.6
SW	.5	1.0	2.7	1.9	.2							6.3	9.2
WSW	.2	1.2	1.3	2.4	.5	.4						5.9	11.1
W	.2	1.3	2.4	1.3	.1							5.3	8.6
WNW	.5	1.4	1.4	.7								4.0	7.2
NW	.4	1.5	3.8	1.3								7.0	8.0
NNW	.6	1.5	2.6	1.2	.1							6.1	8.0
VARBL	1.0	.1										1.1	1.8
CALM												2.7	
	21.3	28.9	29.7	16.5	1.1	.4						100.0	6.7

TOTAL NUMBER OF OBSERVATIONS

842

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS APR MONTH
ALL WEATHER CLASS 2100-2300 HOURS (L.S.T.)
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 14	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.3	3.3	.4									5.0	4.1
NNE	3.9	5.0	4.9	1.8	.2							15.9	6.4
NE	4.5	7.9	3.5	.8								16.7	5.4
ENE	2.5	1.9	.2	.1								4.8	3.6
E	2.0	1.0										3.0	2.6
ESE	1.2	.6										1.8	2.7
SE	.8	.2	.1									1.2	2.5
SSE	.8	.4										1.2	2.7
S	1.6	1.7	1.7									4.9	5.0
SSW	1.8	2.2	3.5	1.2	.2							8.8	7.3
SW	.6	.6	3.2	2.5	.5							7.4	9.7
WSW	1.3	1.4	1.6	1.0	.4							5.6	7.5
W	.8	1.0	1.2	.6								3.6	6.6
WNW	.4	1.4	1.9	.5								4.2	6.9
NW	.4	1.4	2.2	.2	.1							4.3	7.2
NNW	1.4	1.4	1.2									4.1	4.8
VARBL	1.2	.1										1.3	2.5
CALM												6.2	
	26.6	31.5	25.4	8.7	1.4							100.0	5.6

TOTAL NUMBER OF OBSERVATIONS 837

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

MAY
MONTH

ALL WEATHER
CLASS

0000-0200
NOTES (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.8	.9	.3	.1								2.2	4.7
NNE	3.8	4.5	3.3	.9								12.6	5.5
NE	8.7	7.2	2.4	.3								18.7	4.4
ENE	4.4	1.9										6.3	2.9
E	2.3	.7										3.0	2.8
ESE	1.2	.2										1.4	2.0
SE	.3											.3	1.0
SSE	.8	.2										1.0	2.7
S	3.5	3.6	2.4	.1								9.7	4.6
SSW	2.6	4.8	4.2	.7								12.2	6.0
SW	1.4	1.9	2.1	1.0								6.4	6.8
WSW	1.4	1.5	1.5	.6	.1	.1						5.2	7.0
W	.3	1.4	.8	.5	.2							3.3	7.8
WNW	.6	.9	1.2	.3								3.0	6.6
NW		.2	.2	.1	.1							.7	10.5
NNW	.1	.3	.2	.2								.9	7.3
VARBL	2.9											2.9	1.8
CALM												10.1	
	35.2	30.3	18.7	5.0	.5	.1						100.0	4.6

TOTAL NUMBER OF OBSERVATIONS 860

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS MAY MONTH
ALL WEATHER CLASS 0300-0500 HOURS (L.S.T.)
CONDITION

SPEED (KTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.3	1.0	.5									2.7	3.8
NNE	2.1	4.2	2.2	1.4								9.9	6.2
NE	8.2	9.9	2.2	.3								20.6	4.2
ENE	6.1	1.5	.2	.1								7.2	3.0
E	2.6	.3	.2									3.2	2.9
ESE	1.0											1.0	1.9
SE	.8											.8	1.6
SSE	1.1	.2										1.4	2.5
S	3.3	4.5	2.1	.1								10.0	4.7
SSW	1.8	4.7	3.3	.8								10.7	6.0
SW	1.9	1.6	3.6	1.0								8.1	6.5
WSW	.5	1.4	1.0	.6								3.4	7.2
W	.4	1.4	1.6	.5								4.2	6.3
WNW	.2	.5	.7	.3								1.7	7.7
NW		.9	.9	.5								2.3	8.2
NNW	.1	.7	.1	.2								1.1	6.5
VARBL	3.0	.3										3.3	1.8
CALM												7.6	
	34.9	33.1	18.6	5.8								100.0	4.6

TOTAL NUMBER OF OBSERVATIONS 873

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEAR

MAY
MONTH

ALL WEATHER
CLASS

0600-0800
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.5	.7	.7	.5								3.3	5.6
NNE	1.8	1.7	4.7	1.0	.2							9.4	7.2
NE	2.7	6.5	4.5	.8	.2							14.8	6.0
ENE	2.7	5.1	1.2									9.1	4.6
E	3.3	1.2	1.4									5.9	3.8
ESE	.2	.6	.1									.9	4.5
SE	.2	.1										.3	2.3
SSE	.9	.3										1.2	2.4
S	1.5	1.8	1.9	.2								5.5	5.6
SSW	1.9	3.9	5.8	.9								12.5	6.7
SW	1.9	4.2	4.0	2.5	.1							12.7	7.3
WSW	1.4	2.2	1.6	1.1	.2							6.5	7.1
W	.5	1.4	2.0	.9	.1	.1						5.0	8.3
WNW	.2	.8	1.9	.3								3.3	7.4
NW		.7	.5	.3								1.5	8.5
NNW	.2	.1	.2	.3								.9	7.9
VARBL	3.0	.5										3.4	2.0
CALM												3.7	
	24.0	31.7	30.6	9.0	.9	.1						100.0	5.9

TOTAL NUMBER OF OBSERVATIONS

880

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 RHEIN-MAIN APT GERMANY/FRANKFURT

67-76

MAY

STATION

STATION NAME

YEAR

MONTH

ALL WEATHER
CLAS

0900-1100
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.9	1.3	.9	.2								3.3	5.6
NNE	1.3	2.0	3.9	1.6	.1							8.9	7.6
NE	.5	2.0	3.3	1.0	.5							7.2	8.3
ENE	.6	2.0	1.7	.2								4.5	6.4
E	.8	3.1	2.5	.6								7.0	6.7
ESE	.5	1.0	1.0	.2								2.8	6.3
SE		.7	.2									.9	5.5
SSE	.5	.8	.2									1.5	4.4
S	1.3	1.4	1.6	.3								4.6	5.9
SSW	1.3	2.9	3.1	2.6								9.9	7.9
SW	1.2	3.2	3.8	3.6	.5							12.2	8.8
WSW	.7	3.3	3.3	2.9	1.2	.1						11.5	9.5
W	.6	3.1	3.0	2.8	.2							9.7	8.8
WNW	.2	.2	2.1	1.5								4.0	9.9
NW		.3	1.7	.5								2.5	8.8
NNW	.1	.6	1.2	.2								2.1	7.6
VARBL	4.7	1.6										6.3	2.9
CALM												1.0	
	15.0	29.5	33.7	18.3	2.4	.1						100.0	7.5

TOTAL NUMBER OF OBSERVATIONS

869

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-70 YEARS MAY MONTH
ALL WEATHER CLASS 1200-1400 HOURS (L.T.)
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 53	≥ 56	%	MEAN WIND SPEED
N	.2	2.4	1.9	.2								5.0	6.8
NNE	.5	1.6	2.7	1.4		.1						6.3	8.4
NE	.3	1.0	2.2	1.2	.3							5.1	8.8
ENE	.2	1.7	1.2	.5								3.6	7.1
E	.5	2.3	2.6	.7								6.0	6.9
ESE	.6	.7	1.5	.8								3.6	7.6
SE	.1	.6	.7									1.4	6.8
SSE	.3	.3	.1									.8	4.9
S	.9	2.0	2.1	.9								5.9	6.8
SSW	.8	2.1	4.2	2.4	.2							9.8	8.5
SW	.5	2.1	4.8	3.3	1.2	.1						11.8	10.2
WSW	.6	1.6	3.1	2.1	1.2	.2						8.8	10.4
W	.6	3.9	2.8	3.1	.9							11.4	9.2
WNW	.2	1.2	1.4	1.4	.2							4.4	9.4
NW	.2	.7	2.3	1.2								4.4	8.9
NNW	.2	1.0	1.5	.7								3.5	8.2
VARBL	3.9	3.8										7.8	3.4
CALM												.3	
	10.8	29.3	35.0	20.1	4.1	.5						100.0	8.2

TOTAL NUMBER OF OBSERVATIONS 861

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS MAY MONTH
ALL WEATHER CLIM 1500-1700 HOURS (L.G.T.)
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.9	1.7	1.4	.3								4.4	6.1
NNE	.6	1.4	2.5	.7	.2							5.4	7.9
NE	.2	1.5	3.1	1.3	.1							6.2	8.4
ENE	.2	1.5	2.6	.5								4.8	7.4
E	.8	1.7	2.0	.1								4.6	6.3
ESE	.3	2.5	1.4	.2								4.5	6.1
SE	.3	.9	.7									2.0	5.5
SSE	1.4	.5	.5									2.3	4.1
S	1.5	2.3	1.8	.5	.1							6.2	5.9
SSW	.7	3.0	3.2	1.2								8.1	7.2
SW	.1	.8	4.0	2.8	.7	.1						8.5	10.5
WSW	.7	2.1	3.0	2.5	1.5	.1						9.9	10.3
W	.3	2.5	3.3	3.3	.2							9.8	9.2
WNW	.1	1.7	2.8	1.3								5.9	8.3
NW	.1	1.0	3.2	1.0								5.4	8.6
NNW	.2	1.6	2.0	.8								4.6	7.9
VARBL	4.6	2.1										6.7	2.9
CALM												.8	
	13.2	28.9	37.5	16.5	2.9	.2						100.0	7.6

TOTAL NUMBER OF OBSERVATIONS 869

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

MAY
MONTH

ALL WEATHER
CLASS

1800-2000
HOURS (LST)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.1	1.6	1.8									5.5	5.0
NNE	2.1	3.0	2.4	.9								8.3	6.1
NE	3.0	2.1	1.6	1.4								8.0	5.9
ENE	2.4	3.0	1.6	.3								7.3	5.0
E	5.8	3.0	.7									9.5	3.4
ESE	2.5	1.6	.2									4.3	3.4
SE	1.5	.1	.2									1.8	3.1
SSE	2.8	.3										3.2	2.3
S	2.7	2.6	.6	.1								6.0	4.3
SSW	.9	3.1	1.7	.5	.2							6.4	6.4
SW	.6	1.7	3.3	1.8	.5							7.5	9.0
WSW	1.4	2.3	2.5	1.4	.5							8.0	7.9
W	.3	1.7	1.8	1.4	.2	.1						5.6	8.8
WNW		1.5	2.2	.7								4.3	7.6
NW	.5	2.2	2.3	.8								5.7	7.0
NNW	.6	2.1	1.8	.5								4.9	7.0
VARBL	.8	.1										.9	1.9
CALM												2.8	
	29.8	31.4	24.7	9.7	1.4	.1						100.0	5.8

TOTAL NUMBER OF OBSERVATIONS

878

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS MAY MONTH
ALL WEATHER CLASS 2100-2300 HOURS (L.S.T.)
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.1	1.2	.7	.2								3.3	5.1
NNE	2.4	3.7	4.1	.9								11.1	6.1
NE	6.3	7.1	1.2	.7								15.4	4.3
ENE	3.9	3.3	.5									7.6	3.8
E	3.1	2.0										5.1	3.2
ESE	1.5	.7										2.2	2.8
SE	.9	.1										1.0	2.0
SSE	1.2	.2										1.5	2.8
S	3.5	3.1	1.2		.1							7.9	4.5
SSW	2.7	3.4	2.9	.5								9.5	5.5
SW	1.1	1.4	2.5	1.7	.1	.1	.1					7.0	8.6
WSW	1.2	1.7	1.8	.6	.1							5.4	6.6
W	.8	.7	1.4	.6								3.4	7.0
WNW	.1	1.8	1.4	.2								3.5	6.5
NW	.9	1.2	.9	.5								3.5	6.0
NNW	.6	.8	.5	.2								2.0	5.6
VARBL	2.9	.1										3.1	1.7
CALM												7.4	
	34.4	32.7	19.0	6.0	.3	.1	.1					100.0	4.8

TOTAL NUMBER OF OBSERVATIONS 882

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS JUN MONTH
ALL WEATHER CLASS 0000-0200 HOURS (L.S.T.)
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.1	2.1	.5	.2								3.9	5.0
NNE	4.8	6.4	3.8	1.4	.1							16.5	5.6
NE	7.1	8.2	1.3	.2								16.8	4.0
ENE	3.8	1.7										5.4	3.0
E	1.9											1.9	1.9
ESE	.6											.6	2.0
SE	1.3	.1										1.4	1.7
SSE	.9	.2										1.2	2.4
S	4.6	3.0	.9									9.5	3.7
SSW	2.7	3.7	2.8	.2	.1							9.6	5.3
SW	1.8	1.9	2.1	.8								6.6	6.2
WSW	.9	1.4	1.2	.6								4.1	6.5
W	.5	.9	1.3	.7	.1							3.5	7.9
WNW	.2	.8	.7	.1								1.9	6.2
NW	.1	.9	1.4	.2								2.7	7.4
NNW	.6	.9	.5	.4								2.4	6.4
VARBL	1.9											1.9	1.8
CALM												11.0	
	34.9	32.3	16.5	5.0	.4							100.0	4.3

TOTAL NUMBER OF OBSERVATIONS 846

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS JUN MONTH
0300-0500 HOURS (L.S.T.)
ALL WEATHER CLASS
CORRECTION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.3	.6	.7	.6								3.2	5.9
NNE	1.7	4.8	2.6	1.8								10.8	6.8
NE	9.2	6.2	3.0	.1								18.5	4.2
ENE	7.0	2.3										9.3	2.8
E	4.8	.2										5.0	2.1
ESE	.7	.1										.8	1.9
SE	.7	.1										.8	1.6
SSE	1.1											1.1	1.6
S	3.2	1.7	.8									5.7	3.6
SSW	2.9	3.9	3.4	1.0								11.2	5.8
SW	3.0	3.3	2.7	.4								9.4	5.3
WSW	1.0	1.4	.6	.2								3.2	5.5
W	.5	1.0	.6	.6								2.9	6.9
WNW	.2	1.1	.4	.4								2.0	6.8
NW	.2	.7	1.0	.5								2.4	8.3
NNW	.2	1.1	.4									1.7	5.4
VARBL	2.5											2.5	1.9
CALM												9.6	
	40.1	28.4	16.4	5.5								100.0	4.3

TOTAL NUMBER OF OBSERVATIONS 842

2
DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

JUN
MONTH

ALL WEATHER
CLASS

0600-0800
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.8	.7	1.5	.4								3.4	6.9
NNE	1.2	2.7	4.6	3.9	.2							12.5	8.6
NE	2.6	7.8	5.4	.5								16.3	5.7
ENE	2.1	4.6	2.2									8.9	5.0
E	2.3	1.6	.2									4.2	3.1
ESE	.8	.2	.1									1.2	2.6
SE	.5											.5	2.5
SSE	.6											.6	2.2
S	.7	1.1	.7	.5								2.9	6.0
SSW	1.8	3.4	5.4	.9								11.5	6.8
SW	2.0	3.3	4.8	1.1	.1							11.2	6.7
WSW	2.1	2.0	1.3	1.1	.2							6.7	6.2
W	.4	1.3	2.0	.8	.2							4.7	8.2
WNW	.1	1.4	1.9	.6								4.0	7.5
NW	.2	.6	.7	.7								2.2	8.4
NNW		.4	.5									.8	7.1
VARBL	3.3	.4										3.6	2.1
CALM												4.8	
	21.4	31.4	31.3	10.3	.3							100.0	6.0

TOTAL NUMBER OF OBSERVATIONS

85

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 67-76
STATION NAME YEARS
ALL WEATHER
CLASS
JUN
MONTH
0900-1100
HOURS (L.S.T.)
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.5	.9	1.4	.5								3.3	7.1
NNE	.9	2.8	4.6	4.8								13.2	8.8
NE	.9	2.2	4.0	1.2								8.4	7.3
ENE	.4	1.5	2.7	.7								5.6	7.0
E	.7	1.3	1.3	.1								3.4	5.9
ESE	.6	.9	.2									1.8	4.3
SE		.6	.1									.7	5.5
SSE	.8	.6	.1									1.5	3.8
S	1.4	1.4	1.3	.5								4.6	5.7
SSW	1.5	3.3	3.6	2.2	.1							10.8	7.6
SW	.2	2.8	4.0	2.2	.4							9.6	8.8
WSW	.6	2.4	3.2	2.8	.6							9.5	9.2
W	.9	1.6	3.8	1.3	.2							7.8	7.9
WNW		1.2	1.6	.7								3.5	8.5
W	.6	.5	1.5	.8								3.4	7.9
NNW	.4	.7	.8	.5								2.4	7.7
VARBL	6.5	2.9										9.4	2.8
CALM												1.1	
	16.9	28.1	34.4	18.4	1.2							100.0	7.2

TOTAL NUMBER OF OBSERVATIONS 850

DATA PROCESSING BRANCH
E1AC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

JUN
MONTH

ALL WEATHER
CLASS

1200-1400
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	≥56	%	MEAN WIND SPEED
N	.4	2.2	1.9	.1	.2							4.8	7.0
NNE	.8	2.5	5.1	2.8	.2							11.5	8.4
NE	.1	1.4	3.3	1.7	.1							6.6	8.6
ENE	.2	1.7	2.5	1.1								5.6	8.0
E	.7	2.8	2.1	.4								5.9	6.2
ESE	.4	1.0	.5	.2								2.1	6.0
SE	.2	.4	.4									1.0	5.4
SSE	.2	.7	.5									1.4	5.6
S	.4	1.2	1.9	.4								3.9	7.4
SSW	.4	2.4	2.3	2.1								7.1	8.3
SW	.2	1.2	4.5	4.0	.6							10.6	11.2
WSW	.5	2.1	2.4	3.5	1.7							10.1	10.7
W	.2	3.3	4.0	2.9	.4							10.7	9.1
WNW	.2	.7	1.6	.8								3.4	8.4
NW	.1	.7	2.7	1.1								4.6	8.8
NNW		1.0	1.7	.4								3.1	11.8
VARBL	3.7	3.4										7.1	3.3
CALM												.4	
	8.9	28.6	37.2	21.4	3.3							100.0	8.4

TOTAL NUMBER OF OBSERVATIONS

828

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

JUN
MONTH

ALL WEATHER
CLASS

1500-1700
HOURS (LST.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 54	≥ 56	%	MEAN WIND SPEED
N	.7	3.2	2.6	.7								7.3	6.9
NNE	.6	2.7	4.0	2.9	.1							10.3	8.5
NE	.6	1.7	3.7	1.5	.1							7.6	8.3
NNE	1.1	1.4	2.4	.5								5.4	6.8
E	1.3	1.8	1.4	.4								4.9	5.8
ESE	.6	1.0	.1	.1								1.8	4.7
SE	.1	.7	.2									1.1	5.0
SSE	.5	.5	.1									1.1	3.9
S	1.1	2.1	1.2									4.4	5.2
SSW	.2	1.2	3.1	.8								5.4	8.2
SW	.5	1.2	5.9	2.6	.5							8.7	9.7
WSW	.4	2.6	2.7	3.8	1.0	.1						10.6	10.2
W	.7	2.7	4.2	2.5	.8	.1						11.1	9.1
WNW	.2	1.4	2.7	.7	.1							5.2	8.1
NW	.2	1.2	2.1	1.8								5.4	8.9
NNW	.7	2.3	1.5	.5								5.0	6.5
VARBL	2.7	1.5										4.3	3.0
CALM												.7	
	12.2	29.3	31.1	18.8	2.6	.2						100.0	7.8

TOTAL NUMBER OF OBSERVATIONS

841

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS JUN MONTH
ALL WEATHER CLASS 1800-2000 HOURS (L.S.T.)
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.8	3.7	2.7	.7								9.9	5.6
NNE	1.2	2.7	2.6	2.1								8.5	7.3
NE	1.3	2.9	3.6	1.4								9.2	7.3
ENE	2.6	3.9	1.0	.1								7.7	4.5
E	4.1	.9	.3									6.3	3.2
ESE	1.7	1.0	.1									2.9	3.4
SE	.8	.6	.1									1.5	3.5
SSE	1.3	1.2	.1									2.6	3.6
S	2.7	2.7	1.4									6.7	4.3
SSW	1.6	2.3	1.7	.5								6.1	5.5
SW	.9	1.6	3.7	.9	.3							7.5	7.9
WSW	.8	2.2	2.9	1.2	.1							7.2	7.5
W	.7	2.2	2.4	2.2	.3							7.9	8.4
WNW	.1	1.0	1.0	.3								2.6	7.4
NNW	.2	2.0	2.3	.9								5.5	7.4
NNW	1.0	1.6	1.6	.6								4.9	6.5
VARBL	1.0	.2										1.3	2.1
CALM												2.0	
	24.8	32.8	27.7	10.9	.5							100.0	6.0

TOTAL NUMBER OF OBSERVATIONS 862

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

JUN
MONTH

ALL WEATHER
CLASS

2100-2300
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 14	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.3	2.9	1.5									6.7	4.7
NNE	3.3	6.0	3.1	1.9	.1							14.4	6.0
NE	4.6	5.4	1.8	.4								12.1	4.6
ENE	3.7	1.9	.2									5.8	3.2
E	3.0	.7	.1									3.8	2.6
ESE	1.9	1.1										3.0	2.8
SE	.7	.5										1.2	3.0
SSE	.8	.1										1.0	2.5
S	3.5	4.0	1.0	.1								8.6	4.2
SSW	1.8	2.6	2.6	.5								7.5	6.1
SW	1.4	1.3	2.3	.4								5.4	6.6
WSW	1.2	1.7	1.2	.8	.1							5.0	6.5
W	.5	2.6	.7	.5								4.3	6.0
WNW		.8	1.0	.2								2.0	7.4
NW	.6	1.2	1.3	.2								3.3	6.5
NNW	.8	1.5	1.1									3.5	5.6
VARBL	2.6	.4										3.0	2.1
CALM												9.5	
	32.7	34.6	17.9	5.0	.2							100.0	4.5

TOTAL NUMBER OF OBSERVATIONS

840

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS JUL
MONTH
ALL WEATHER CLASS 0000-0200
HOURS (L.S.T.)
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.5	.6										2.1	2.7
NNE	3.3	3.9	1.9	.5								9.5	5.1
NE	8.5	6.9	1.5	.1								17.1	3.9
ENE	4.9	2.0	.1									7.0	3.1
E	2.2	.2										2.5	2.0
ESE	.8											.8	1.7
SE	.9	.2										1.2	2.4
SSE	1.6	.1										1.8	2.1
S	4.0	2.9	.7									7.6	3.7
SSW	4.2	4.7	2.5	1.2								12.5	5.3
SW	1.5	3.2	1.4	.6								6.7	5.6
WSW	1.8	1.6	1.1	.7								5.1	5.5
W	.6	1.4	.9	.6								3.5	6.4
WNW	.2	.9	1.3	.4	.1							2.9	7.7
NW	.5	1.2	1.1	.1								2.8	6.3
NNW	.6	.5	.7									1.8	5.0
VARBL	2.1	.1										2.2	1.9
CALM												13.0	
	39.3	30.4	13.1	4.1	.1							100.0	3.9

TOTAL NUMBER OF OBSERVATIONS 855

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS JUL MONTH
ALL WEATHER CLASS 0300-0500 HOURS (L.S.T.)
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	.6	.1									1.3	3.5
NNE	2.2	1.9	1.3	.7								6.0	5.4
NE	8.0	7.0	1.3	.7								17.0	4.1
ENE	7.4	1.9	.1									9.4	2.8
E	2.9	.3										3.3	2.2
ESE	1.0											1.0	1.6
SE	.2											.2	2.5
SSE	1.9											1.9	1.5
S	6.2	3.6	1.3									11.0	3.6
SSW	4.8	3.7	4.8	1.0								14.3	5.5
SW	2.4	2.2	2.4	1.6								8.7	6.4
WSW	1.0	1.7	1.2	.1								4.1	5.2
W	.6	1.7	1.3	.1								3.7	5.9
WNW	.6	.5	1.0	.5								2.6	6.9
NW	.3	.6	.8	.2								2.0	6.5
NNW	.7	.6	.7	.1								2.1	5.3
VARBL	2.0											2.0	1.4
CALM												9.5	
	42.9	26.2	14.3	5.1								100.0	4.1

TOTAL NUMBER OF OBSERVATIONS 861

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 JUL
STATION STATION NAME YEARS MONTH
ALL WEATHER
CLASS
CONDITION
0600-0800
HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	.5	.6									1.6	4.7
NNE	1.3	1.7	2.6	.6								6.2	6.7
NE	2.9	6.4	3.9	.7								13.9	5.7
ENE	2.8	6.2	1.4	.1								10.5	4.6
E	3.1	1.7	.7									5.5	3.6
ESE	.6		.1									.7	2.2
SE	.5	.1										.6	2.0
SSE	.6	.1										.7	2.5
S	1.8	1.7	.7	.5								4.7	4.9
SSW	2.4	5.4	4.7	1.3								13.8	6.3
SW	2.0	2.6	4.7	3.1	.1							12.5	7.7
WSW	2.0	2.6	1.8	.7								7.1	5.7
W	1.0	1.7	1.0	.3								4.1	5.7
WNW	.3	1.8	1.3	.2								3.7	6.3
NW	.7	.9	1.5	.8								3.9	7.7
NNW	.2	.5	.8									1.5	6.3
VARBL	3.1	.1										3.2	1.9
CALM												5.6	
	25.8	34.3	25.9	8.3	.1							100.0	5.4

TOTAL NUMBER OF OBSERVATIONS 869

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS JUL NORTH
ALL WEATHER CLASS 0900-1100 HOURS (L.S.T.)
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 53	≥ 56	%	MEAN WIND SPEED
N	.9	1.4	1.5									3.8	5.5
NNE	.7	2.1	2.9	.6								6.3	6.7
NE	.7	2.5	2.8	.3								6.4	6.5
ENE	1.2	2.4	1.4									5.0	5.3
E	1.5	2.7	1.0									5.2	4.7
ESE	.9	1.2	1.0									3.1	5.4
SE		.5	.3									.8	5.9
SSE	.3	.3	.1									.8	4.0
S	1.4	1.2	.9	.6								4.1	5.8
SSW	.8	2.5	4.1	2.1	.1							9.6	7.9
SW	1.4	2.0	5.3	2.3	.8	.2						12.1	9.1
WSW	.7	2.9	3.7	2.2	.8							10.4	8.8
W	1.6	2.5	3.5	1.6	.1							9.4	7.5
WNW	.8	2.0	2.8	.2								5.8	6.7
NW	.1	1.2	2.3	.8								4.4	8.2
NNW	.2	.3	.8	.6								2.0	8.1
VARBL	4.0	4.2										10.3	3.1
CALM												.6	
	19.4	32.0	34.5	11.5	1.9	.2						100.0	6.7

TOTAL NUMBER OF OBSERVATIONS 863

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

JUL
MONTH

ALL WEATHER
CLASS

1200-1400
HOURS (LST)

CONDITION

SPEED (KNTS) DIR.	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	≥56	%	MEAN WIND SPEED
N	.5	2.2	1.3	.1								4.1	6.1
NNE	.4	2.7	2.9	.1								6.0	6.6
NE	.2	1.8	1.4	.7								4.2	7.3
ENE	.6	1.0	1.1	.1								2.8	6.0
E	.2	1.8	1.9									4.0	6.3
ESE	.5	1.0	.7									2.2	5.6
SE	.1	1.2	.2									1.6	5.3
SSE		.4	.7									1.1	6.8
S	.1	2.1	1.6	.6								4.3	7.0
SSW	.2	1.7	3.4	1.8	.1	.1						7.4	9.0
SW	.5	1.9	4.6	3.3	1.0	.1						11.3	10.0
WSW	.4	1.7	3.9	4.5	1.4	.1						11.9	10.9
W	1.3	3.3	4.8	2.9	.5							12.8	8.3
WNW	.4	2.2	3.1	1.6								7.2	8.1
NW	.1	1.4	2.1	1.4								5.1	8.2
NNW	.2	2.3	1.7	.6								4.8	7.1
VARBL	4.6	4.5	.1									9.2	3.5
CALM													
	10.4	32.9	35.6	17.7	3.0	.4						100.0	7.8

TOTAL NUMBER OF OBSERVATIONS

829

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS JUL MONTH

ALL WEATHER
CLAS

1500-1700
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	2.1	1.6	.2								4.6	6.3
NNE	.8	3.0	3.2	.4								7.4	6.5
NE	.2	1.4	2.3	.7								4.7	7.9
ENE	.4	2.0	1.2	.2								3.7	6.1
E	.1	1.5	1.1									2.7	5.9
ESE	.6	1.4	.5									2.5	4.6
SE	.1	1.1	.6									1.8	5.8
SSE	.6	.9	.2									1.8	4.6
S	.8	1.9	1.8	.2								4.7	6.3
SSW	.5	2.0	3.5	1.3								7.3	7.9
SW	.4	2.5	4.6	3.0	.7							11.1	9.2
WSW	.6	2.0	3.3	4.4	1.8	.1						12.2	11.0
W	.5	2.0	3.4	2.3	.7	.2						9.1	9.7
WNW	.2	1.8	3.5	1.2	.2							6.9	8.5
NW	.6	1.5	3.4	1.8								7.3	8.2
NNW	.4	1.5	2.8	1.5								6.2	8.1
VARBL	3.2	2.7										5.8	3.3
CALM												.5	
	10.4	31.2	36.8	17.3	3.4	.4						100.0	7.8

TOTAL NUMBER OF OBSERVATIONS 855

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 JUL
STATION MONTH
ALL WEATHER 1800-2000
CLAS HOURS (L.S.T.)
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.0	2.5	1.2	.2								4.8	5.4
NNE	1.3	3.5	2.9	.3								8.0	6.1
NE	1.9	2.1	1.5	.2								5.7	5.2
ENE	3.6	2.3	.5									6.4	3.6
E	3.7	2.3	.1									6.2	3.4
ESE	2.1	.9										3.0	2.8
SE	1.4	.5										1.9	2.7
SSE	1.2	.3										1.5	2.9
S	3.3	3.5	1.4									8.2	4.4
SSW	1.2	2.6	2.1	.2								6.1	5.8
SW	.3	2.6	3.1	2.0								8.0	8.1
WSW	.8	2.0	2.0	1.4								6.2	7.8
W	.9	2.6	2.9	2.2	.9	.2	.1					9.9	9.5
WNW	.1	.9	2.9	.8								4.8	8.1
NW	.6	3.0	3.0	.6								7.2	6.8
NNW	1.9	3.0	2.7	.3								7.9	5.9
VARBL	.9	.7										1.6	3.1
CALM												2.6	
	26.2	35.2	26.3	8.4	.9	.2	.1					100.0	5.8

TOTAL NUMBER OF OBSERVATIONS 858

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 RHEIN-MAIN APT GERMANY/FRANKFURT

67-76

JUL

ALL WEATHER
CLAS

2100-2300
HOURS (L.E.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.5	2.4	.7									4.6	4.1
NNE	3.6	3.8	2.2	1.2								10.8	5.4
NE	5.1	5.2	.9	.2								11.4	4.2
ENE	3.2	1.8	.1									5.1	3.1
E	2.8	.8										3.6	2.5
ESE	1.1	.2										1.3	2.5
SE	.7	.5										1.2	2.7
SSE	.7	.7										1.4	3.1
S	4.7	3.3	.9	.1								9.0	3.9
SSW	2.9	3.4	1.5	1.1								8.9	5.5
SW	1.8	2.6	2.0	.7								7.1	6.1
WSW	.8	2.1	1.4	.4								4.7	6.1
W	.4	1.8	1.6	.8	.4	.1						5.1	8.5
WNW	.2	.9	1.5	.4	.1							3.2	7.7
NW	.4	1.2	2.4	.2								4.1	7.1
NNW	1.9	2.1	1.2	.1								5.3	4.8
VARBL	3.3	.5										3.8	2.1
CALM												9.5	
	35.0	33.1	16.6	5.2	.5	.1						100.0	4.5

TOTAL NUMBER OF OBSERVATIONS

851

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS AUG MONTH
ALL WEATHER CLIM 0000-0200 HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.3	.9	.2								2.4	3.7
NNE	3.9	5.7	2.8	.3							12.8	5.0
NE	10.1	10.8	2.1	.1							23.1	4.0
ENE	5.6	.9									6.5	2.5
E	2.9	.3									3.3	2.1
ESE	1.6	.1									1.7	1.9
SE	.6	.1									.7	2.7
SSE	1.4	.1									1.5	2.1
S	4.2	2.8	.6	.2							7.8	3.8
SSW	3.3	5.0	3.3	.3							11.3	5.4
SW	2.3	3.1	2.8	.1							8.4	5.4
WSW	1.0	.6	.7								2.3	4.7
W	.6	.3	.3	.1							1.4	5.2
WNW	.6	.9	.7	.1							2.3	5.8
NW	.5	1.0	1.3	.2							3.0	6.5
NNW	.3	.2	.1								.7	4.2
VARBL	1.7										1.7	1.9
CALM											8.5	
	41.9	33.1	16.9	1.6							100.0	3.9

TOTAL NUMBER OF OBSERVATIONS 861

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEAR

AUG
MONTH

ALL WEATHER
CLASS

0300-0500
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.8	.5	.1									1.4	3.5
NNE	3.0	3.5	2.5	.1								9.1	4.9
NE	11.3	8.4	1.5	.1								21.3	3.7
ENE	8.4	2.4										10.8	2.6
E	3.7	.6										4.2	2.1
ESE	1.8	.1										1.9	1.7
SE	1.0	.2										1.3	2.0
SSE	1.6	.3										1.9	2.4
S	3.7	2.4	.9									7.0	3.9
SSW	3.0	5.0	4.7	.1								12.8	5.6
SW	.9	2.2	2.4	.7								6.2	6.4
WSW	1.0	.8	.8									2.6	4.4
W	.5	.6	.6	.1								1.7	5.3
WNW	.2	.8	.8									1.8	6.1
NW	.5	.5	1.5									2.4	6.5
NNW	.3	.2	.1									.7	3.8
VARBL	3.0	.2										3.2	1.6
CALM												9.6	
	44.6	28.8	15.9	1.1								100.0	3.7

TOTAL NUMBER OF OBSERVATIONS

876

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

AUG
MONTH

ALL WEATHER
CLASS

0600-0800
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.4	.5	.1									1.9	2.8
NNE	2.2	2.8	3.6	.3								9.0	5.9
NE	4.0	10.4	6.2	.1								20.6	3.0
ENE	5.1	4.9	1.9									12.0	4.2
E	3.6	2.4	.3									6.4	3.1
ESE	1.4	.3										1.7	2.3
SE	.8											.8	2.1
SSE	.8	.1										.9	1.9
S	1.4	1.4	1.4	.1								4.2	5.1
SSW	2.1	5.0	5.0	.8								12.9	6.2
SW	2.2	3.1	5.9	1.6								12.8	6.9
WSW	.9	.9	1.3	.5	.1							3.6	6.6
W	.5	.8	.5	.6								2.3	7.1
WNW	.1	.5	1.0	.1								1.7	7.5
NW	.8	.6	.3	.2								1.9	4.6
NNW	.3	.1	.1	.1								.7	5.5
VARBL	1.6	.1										1.7	1.9
CALM												4.9	
	29.0	33.8	27.7	4.4	.1							100.0	5.0

TOTAL NUMBER OF OBSERVATIONS 878

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

AUG
MONTH

ALL WEATHER
CLASS

0900-1100
HOURS (L.F.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.2	1.5	.6									2.3	5.4
NNE	1.8	3.2	3.9	1.1								10.0	6.7
NE	1.0	3.7	4.2	.1								9.0	6.2
ENE	1.5	4.5	2.9	.3								9.2	5.8
E	1.5	3.4	3.0	.6								8.4	6.2
ESE	.8	1.6	1.4	.1								3.8	5.6
SE	.6	.5	.5									1.5	5.2
SSE	.8	.1	.1									1.0	3.0
S	1.2	1.8	1.7	.5								5.2	6.1
SSW	1.1	3.2	4.5	1.6								10.4	7.5
SW	1.5	3.9	3.7	3.0	.3							12.5	7.8
WSW	.7	1.0	3.6	2.8	.5							8.6	9.6
W	.7	.9	1.4	1.6								4.5	8.4
WNW		.8	1.0	.2								2.0	7.4
NW		.2	1.2	.3								1.8	9.0
NNW	.1	.3	.1									.6	5.0
VARBL	6.2	1.9										8.1	2.5
CALM												1.1	
	19.6	32.4	33.8	12.3	.8							100.0	6.5

TOTAL NUMBER OF OBSERVATIONS

888

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS AUG MONTHS
1200-1400 HOURS (L.S.T.)

ALL WEATHER
CLASS

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	1.7	1.4	.2								3.9	6.5
NNE	.6	1.9	4.3	1.2								7.9	7.8
NE	.8	3.5	2.3	.9								7.5	6.7
ENE	.2	1.9	1.9	.2								4.2	7.1
E	.8	3.4	3.1	.2								7.5	6.5
ESE	.1	1.6	2.0	.3								4.1	6.9
SE	.3	.9	1.0	.2								2.5	6.1
SSE	.5	1.2	1.0									2.7	5.7
S	.7	2.4	2.1	.2	.1							5.6	6.4
SSW	.1	1.7	1.9	2.4								6.1	9.1
SW	.6	2.2	3.6	3.8	.8							11.0	9.9
WSW	1.2	1.9	3.5	4.5	.8							11.8	9.7
W	.5	1.4	2.4	2.8	.6	.1						7.8	10.1
WNW	.1	.8	.6	.5								3.0	8.1
NW	.1	.5	.8	.5								1.9	8.1
NNW	.1	.3	.8	.3								1.6	8.1
VARBL	6.4	3.9										10.3	3.1
CALM												.6	
	13.7	31.2	33.7	18.4	2.3	.1						100.0	7.5

TOTAL NUMBER OF OBSERVATIONS 863

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

AUG
MONTH

ALL WEATHER
CLASS

1500-1700
HOURS (LST)

CONDITION

SPEED (KNTS) DIR.	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	≥56	%	MEAN WIND SPEED
N	.2	1.9	1.9	.2	.1							4.5	7.2
NNE	.7	1.8	2.4	1.7								7.7	7.9
NE	.5	2.1	3.0	.5								6.0	7.1
ENE	1.8	3.0	2.3	.2								7.3	5.7
E	.9	2.7	2.5	.5								6.6	6.6
ESE	1.1	1.8	.8	.1								3.9	5.1
SE	.3	1.8	.8	.1								3.1	5.7
SSE	1.0	1.0	.5									2.5	4.3
S	.7	2.9	2.2	.3								6.1	6.3
SSW	.7	1.8	2.0	1.6	.1							6.9	8.3
SW	.3	1.1	3.0	3.8								8.2	9.8
WSW	1.0	1.4	2.5	4.6	.9							10.4	10.5
W	.8	1.7	2.4	2.3	.6							7.8	9.1
WNW	.2	.6	2.1	.9								3.8	8.8
NW	.8	1.0	2.3	.6								4.7	7.2
NNW	.5	.9	1.4	.2								3.0	6.8
VARBL	4.5	2.2										6.6	2.9
CALM												.9	
	16.2	28.9	33.7	17.6	1.7							100.0	7.3

TOTAL NUMBER OF OBSERVATIONS

873

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS
AUG MONTH
1800-2000 HOURS (L.S.T.)
ALL WEATHER CLASS
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 14	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.1	2.3	1.0	.1								4.6	5.0
NNE	2.7	3.8	3.3	.6								10.4	5.7
NE	2.2	4.2	3.2	.3								9.9	5.7
ENE	3.1	3.8	1.0									7.9	4.1
E	6.7	3.1	.3									10.2	3.1
ESE	2.4	1.1	.1									3.7	3.2
SE	.9	.1	.1									1.1	3.1
SSE	1.1	.6	.2									1.9	3.4
S	2.4	2.7	1.8	.1								7.1	5.0
SSW	.8	1.7	2.7	1.0								6.3	7.3
SW	1.0	1.8	4.2	1.5								8.6	7.6
WSW	.6	1.6	1.8	1.3	.1							5.4	8.0
W	.6	.9	2.3	1.4	.1							5.3	8.1
WNW	.2	1.5	.7	.5								2.9	7.2
NW	.3	2.4	1.1	.5	.1							4.5	7.1
NNW	1.1	1.8	1.3	.2								4.5	5.3
VARBL	2.3	.1										2.4	1.7
CALM												3.7	
	29.7	33.6	25.3	7.4	.3							100.0	5.4

TOTAL NUMBER OF OBSERVATIONS 876

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-HAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

AUG
MONTH

ALL WEATHER
CLASS

2100-2300
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.5	1.4	.6	.1								3.5	4.6
NNE	4.9	5.7	3.3									13.8	4.7
NE	7.7	9.3	2.0									19.1	4.1
ENE	3.2	3.0	.2									6.4	3.6
E	2.8	1.0	.1									4.0	2.6
ESE	1.5	.1										1.6	2.2
SE	.2	.1										.3	2.3
SSE	1.4											1.4	1.3
S	3.5	3.1	1.7									8.3	4.2
SSW	2.6	3.5	4.4	.7								11.2	6.0
SW	1.1	2.0	4.0	.7								7.8	6.6
WSW	1.2	1.9	.9	.1	.1							4.3	5.5
W	.3	.2	.2	.3								1.1	7.0
WNW	.1	.6	.6	.1								1.4	7.1
NW	.3	1.6	.8	.2								3.0	6.0
NNW	.6	.5	.7									1.7	5.8
VARBL	2.6											2.6	2.1
CALM												8.5	
	35.6	33.9	19.5	2.3	.1							100.0	4.3

TOTAL NUMBER OF OBSERVATIONS 881

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

SEP
MONTH

ALL WEATHER
CLASS

0000-0200
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.0	.6	.1									1.7	3.5
NNE	3.5	3.6	1.4	.4								8.9	4.6
NE	9.8	7.3	1.7									18.8	3.7
ENE	6.8	1.9										8.7	2.6
E	3.6	.2										3.8	2.2
ESE	1.1	.1										1.2	1.7
SE	1.1											1.1	1.4
SSE	.8	.4										1.2	2.4
S	3.0	4.6	3.0	.2								10.8	5.2
SSW	3.5	5.5	4.4	2.8	.1							16.3	6.6
SW	1.1	1.2	1.8	1.8								5.9	8.0
WSW	1.3	.6	.7									2.6	4.6
W	1.0	.7	.5	.7								2.9	6.5
WNW	.1	.1	.1									.4	5.0
NW	.2	.2	.2									.7	5.3
NNW	.4	.5	.1									1.0	3.9
VARBL	1.2											1.2	1.5
CALM												12.9	
	39.4	27.5	14.1	5.9	.1							100.0	4.1

TOTAL NUMBER OF OBSERVATIONS

835

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

SEP
MONTH

ALL WEATHER
CLASS

0300-0500
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.4	.1										.5	2.5
NNE	1.9	3.4	1.4									6.7	5.0
NE	9.9	6.0	1.4									17.3	3.6
ENE	10.2	2.5	.2									12.9	2.6
E	5.1	.2										5.3	1.8
ESE	1.3											1.3	1.5
SE	.7	.1										.8	2.0
SSE	1.2	.2										1.4	2.3
S	4.0	5.1	2.4	.6								12.0	5.0
SSW	2.9	4.7	4.0	2.9								14.6	6.7
SW	1.2	2.0	2.6	1.1	.2							7.1	7.2
WSW	1.3	.7	.7	.5								3.2	5.4
W	.2	.5	.5									1.2	5.8
WNW	.1	.2	.2	.1								.7	7.2
NW	.1	.2	.1									.5	4.8
NNW	.5											.5	1.5
VARBL	2.0											2.0	1.8
CALM												12.2	
	42.9	26.0	13.5	5.2	.2							100.0	3.9

TOTAL NUMBER OF OBSERVATIONS

851

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

SEP
MONTH

ALL WEATHER
CLASS

0600-0800
HOURS (LST)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 15	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.6	.5	.1									2.2	2.8
NNE	1.3	2.2	2.7	.1								6.3	5.9
NE	4.8	9.4	3.3	.2								17.8	5.4
ENE	6.1	3.9	.7									10.6	3.3
E	4.8	1.5										6.3	2.5
ESE	1.8											1.8	1.7
SE	.9	.1										1.1	1.7
SSE	.7	.5										1.2	2.3
S	1.9	2.7	2.6	1.3								8.4	6.4
SSW	1.6	4.8	5.8	2.3	.1							14.7	7.2
SW	1.4	5.8	2.5	2.2	.1							12.0	6.9
WSW	1.3	2.3	.5	.6	.1	.1						4.9	6.0
W	.2	.6		.2	.1							1.2	7.5
WNW			.5	.2								.7	9.8
NW		.1	.2	.1								.5	8.0
NNW		.1	.1									.2	5.5
VARBL	1.8											1.8	1.3
CALM												8.3	
	30.2	34.5	18.9	7.4	.5	.1						100.0	4.9

TOTAL NUMBER OF OBSERVATIONS 855

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

SEP
MONTH

ALL WEATHER
CLASS

0900-1100
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.4	.6	.5									1.4	5.4
NNE	1.7	3.9	3.2	.6	.1							9.5	6.4
NE	1.4	3.2	2.9	.8								8.3	6.1
ENE	1.5	4.9	2.0	.2								8.7	5.6
E	1.8	2.7	1.3									5.8	4.8
ESE	1.0	.8										1.8	3.5
SE	.8	.2	.2									1.3	3.8
SSE	.4	.4										.7	4.0
S	1.8	2.7	3.6	1.8								9.9	7.1
SSW	2.7	4.9	4.5	4.2								16.3	7.6
SW	1.0	5.1	4.5	4.8	1.1	.1						16.5	9.0
WSW	1.3	1.8	1.3	1.5	.2							6.2	8.0
W	.6	.8	.5	.8	.2							3.0	8.4
WNW	.4	.2	.4	.2	.1							1.3	8.2
NW	.1	.4	.2	.2								1.0	7.1
NNW	.2	.1	.1	.2								.7	7.5
VARBL	4.6	1.1										5.7	2.3
CALM												2.0	
	21.6	33.8	25.2	15.4	1.8	.1						100.0	6.6

TOTAL NUMBER OF OBSERVATIONS 842

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

SEP
MONTH

ALL WEATHER
CLASS

1200-1400
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.8	.8	.7	.1								2.5	5.5
NNE	.7	2.5	3.5	1.1								7.8	7.3
NE	.7	2.0	3.7	1.0								7.5	7.5
ENE	.1	2.0	2.0									4.2	6.2
E	.8	2.0	1.1									4.0	5.2
ESE	.4	.6	1.6									2.5	6.7
SE	.5	.6	.4									1.4	4.8
SSE	.6	.8	.1	.1								1.7	4.0
S	1.3	2.6	2.4	3.1	.2							9.7	8.2
SSW	2.0	3.8	6.5	2.9	.6							15.9	8.0
SW	.5	3.7	4.4	4.0	1.6							14.2	9.9
WSW	1.4	1.6	2.9	3.5	1.4							10.8	10.1
W	.1	1.4	1.3	1.4	.2							4.6	8.9
WNW		.5	.7	.6								1.8	9.1
NW	.4	.4	.5	.4								1.6	7.4
NNW	.5	.8	.4	.1								1.8	5.7
VARBL	5.5	1.8										7.3	2.9
CALM												.7	
	16.5	28.2	32.2	18.3	4.1							100.0	7.6

TOTAL NUMBER OF OBSERVATIONS

832

USAFETAC

FORM
AR 64

0-8-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS SEP MONTH
ALL WEATHER CLASS 1500-1700 HOURS (L.S.T.)

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.4	1.8	1.2	.2								4.5	5.4
NNE	.8	2.5	2.5	.8								6.6	6.7
NE	1.2	1.9	4.2	.2								7.5	6.8
ENE	1.6	3.2	1.2	.2								6.2	5.1
E	2.3	2.9	.5									5.7	3.8
ESE	1.9	1.6	.6									4.1	4.1
SE	1.2	.4	.4									1.9	3.8
SSE	2.0	.6	.2									2.8	2.9
S	2.6	3.6	4.2	1.6								12.1	6.4
SSW	1.3	3.2	4.2	2.1	.2							11.0	7.9
SW	.7	2.5	4.0	2.5	.4							10.0	8.7
WSW	2.3	1.1	2.9	3.8	.7							10.8	9.1
W	.2	.2	1.9	1.9								4.2	10.1
WNW	.1	.7	.7	1.1								2.6	8.7
NW	.1	1.1	1.5	.5								3.2	7.6
NNW	.6	.8	.9	.1								2.5	6.0
VARBL	3.0	.2										3.3	2.2
CALM												1.1	
	23.4	28.1	31.1	15.0	1.3							100.0	6.7

TOTAL NUMBER OF OBSERVATIONS 853

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

SEP
MONTH

ALL WEATHER
CLASS

1800-2000
LOCAL (LST)

CONDITIONS

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.4	1.5	.7	.1								4.3	4.2
NNE	3.9	4.4	2.6	.4								11.2	4.9
NE	4.1	3.4	1.3	.2								9.1	4.4
ENE	3.4	2.2										5.7	3.1
E	4.1	2.4										6.5	3.0
ESE	2.5	.2										2.7	2.0
SE	2.0	.6										2.6	2.7
SSE	1.8	.2	.1	.1								3.0	3.6
S	3.5	3.4	4.6	.2								11.8	5.5
SSW	1.1	3.0	4.0	1.4								9.5	7.2
SW	.8	1.8	3.5	1.2	.1	.1						7.6	8.0
WSW	.2	1.5	2.2	.9	.1							5.1	8.1
W	.7	.9	.9	.5								3.1	6.7
WNW	.1	1.1	.4	.4								1.9	7.1
NW	.3	.9	1.8		.1							3.3	6.4
NNW	.7	1.9	.5	.2								3.3	5.3
VARBL	2.4	.4										2.7	2.1
CALM												6.7	
	33.8	30.6	22.7	5.7	.4	.1						100.0	4.9

TOTAL NUMBER OF OBSERVATIONS 646

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS SEP NORTH

ALL WEATHER
CLASS

2100-2300
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.7	1.1										2.7	3.0
NNE	5.0	3.8	2.9	.1								11.8	4.6
NE	8.6	6.5	1.3									16.4	3.7
ENE	5.9	2.3										8.2	2.8
E	3.1	.2										3.3	2.1
ESE	1.2	.2										1.4	2.1
SE	.4	.4										.7	3.7
SSE	1.3	.1										1.4	2.0
S	3.9	4.5	3.1	.7								12.2	5.2
SSW	1.5	1.9	5.6	1.8	.1							13.0	7.1
SW	1.3	1.2	1.9	1.7								6.1	7.6
WSW	1.1	.4	1.3	.5	.2							3.4	7.5
W	.2	.6	.5	.5	.1							1.9	8.1
WNW	.1	1.1	.5									1.7	6.1
NW	.6	.5	.4									1.4	4.5
NNW	.1	.6	.4									1.1	5.4
VARBL	2.4	.2										2.6	1.9
CALM												10.6	
	38.4	27.6	17.7	5.2	.5							100.0	4.3

TOTAL NUMBER OF OBSERVATIONS 841

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS UIC ROUTE 0000-0200
NOV 68 (L.S.T.)

ALL WEATHER
CLEAR

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.5	.2	.5									1.2	4.9
NNE	1.5	2.5	1.5	.6								6.1	5.2
NE	7.1	6.9	1.2	.2								15.4	3.8
ENE	6.1	4.8	.1									11.0	3.3
E	3.6	1.2	.1									4.9	2.5
ESE	.2	.4										.6	4.2
SE	.8											.8	1.4
SSE	1.3	.2										1.5	1.8
S	3.7	3.2	2.6	.9								10.4	5.3
SSW	3.7	4.6	5.6	2.3								16.2	6.6
SW	2.0	2.2	4.0	2.5	.4							11.0	7.9
WSW	1.1	1.2	.7	.5	.1							3.5	6.2
W	.4	1.5	.6									2.5	5.3
WNW		.7	.4	.5								1.5	8.7
W	.2	.1	.4									.7	5.5
NNW	.2	.1	.1	.1								.6	6.0
VARBL	2.2											2.2	1.8
CALM												9.9	
	36.7	29.7	17.6	7.6	.5							100.0	4.6

TOTAL NUMBER OF OBSERVATIONS 856

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

OCT
MONTH

ALL WEATHER
CLASS

0300-0500
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	.3	.7									1.6	5.5
NNE	2.9	2.3	.8	.2								6.2	4.2
NE	7.3	6.7	1.6									15.7	3.8
ENE	6.2	4.2	.2									10.6	3.3
E	3.2	1.7	.1									5.0	2.9
ESE	.9											.9	1.8
SE	.5											.5	1.5
SSE	.5	.3	.1	.1								1.0	4.7
S	3.0	3.4	2.3	1.0								9.7	5.7
SSW	3.4	4.3	5.3	2.6	.2							15.9	7.0
SW	2.3	3.0	2.4	2.5	.2							10.4	7.4
WSW	1.7	1.1	1.0	.9	.2							5.0	6.8
W	.5	.9	.9	.8								3.1	7.7
WNW	.2	.6	.2	.1								1.1	5.7
WW	.1	.7	.2									1.0	5.1
NNW	.2	.1		.2								.6	8.0
VARBL	1.9	.1										2.1	1.8
CALM												9.6	
	35.3	29.9	15.9	8.6	.7							100.0	4.7

TOTAL NUMBER OF OBSERVATIONS 875

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT

67-76

YEARS

001

MONTH

ALL WEATHER
CLASS

0600-0800
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.8	.1	.9									1.8	5.3
NNE	2.3	.9	1.0	.7								4.9	5.4
NE	4.8	5.7	1.9	.3								12.7	4.6
ENE	3.9	4.2	.9									11.0	3.6
E	3.5	2.6	.1									6.3	3.3
ESE	1.8	.3										2.2	2.5
SE	1.4	.2	.2									1.8	2.9
SSE	.5	.1	.1									.7	3.3
S	3.4	3.1	2.6	.6								9.7	5.2
SSW	1.8	5.2	5.1	3.6	.6							16.4	7.9
SW	1.6	3.0	4.8	2.4	.8							12.5	8.3
WSW	1.8	1.7	.9	1.3	.1							5.8	6.6
W	.8	.7	.8	.5								2.7	6.8
WNW	.2	.3	.3	.2								1.1	7.1
NW	.1	.5	.2									.8	5.7
NNW	.2	.1	.2	.2								.8	7.9
VARBL	2.2											2.2	1.5
CALM												6.6	
	33.1	28.8	20.3	9.8	1.5							100.0	5.3

TOTAL NUMBER OF OBSERVATIONS

879

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

UCT
MONTH

ALL WEATHER
CLASS

0900-1100
HOURS (L.S.T.)

COLLECTION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	.2	1.0		.1							1.9	6.8
NNE	.8	1.5	1.8	.8	.1							4.9	7.3
NE	1.7	3.1	3.4	.8								9.0	6.4
ENE	2.2	3.5	2.7									8.4	5.2
E	3.6	2.7	1.9									8.2	4.4
ESE	1.1	1.1	1.0	.1								3.4	5.1
SE	.7	.3	.1									1.1	3.0
SSE	.4	.2	.2									.9	4.3
S	2.4	2.4	1.0	.7								6.4	5.3
SSW	2.2	4.4	5.2	3.4	.2							15.4	7.6
SW	3.0	5.6	4.4	4.2	.9		.1					18.2	8.1
WSW	1.5	1.8	2.6	2.2	.8							8.9	8.8
W	.8	.7	1.1	1.6	.1	.2						4.5	9.6
WNW	.1	.6	1.1	.6								2.4	8.3
NW		.2	.7	.3		.2						1.5	11.5
NNW			.2									.2	10.0
VARBL	2.5	.1										2.6	1.9
CALM												2.2	
	23.6	28.4	28.4	14.6	2.2	.4	.1					100.0	6.7

TOTAL NUMBER OF OBSERVATIONS 891

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS UCT NORTH
ALL WEATHER CLASS 1200-1400 HOURS (L.G.T.)
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.2	.5	.7	.2								1.6	6.7
NNE	.6	1.6	2.1	.7	.2							5.2	7.7
NE	1.2	2.4	3.2	1.0								7.8	7.1
ENE	.8	2.2	1.3	.6								4.8	6.3
E	1.5	2.8	2.2									6.5	5.3
ESE	1.0	1.0	1.2	.1								3.3	5.4
SE	.5	.5	.3									1.3	4.9
SSE	.5	.7	.1									1.3	3.6
S	1.6	1.7	1.4	.2								5.0	5.6
SSW	1.4	3.7	5.7	2.7	.3							13.7	8.0
SW	2.2	3.1	4.5	6.0	1.0	.2		.1				17.2	9.8
WSW	1.6	2.7	3.1	3.0	1.4	.3						12.1	9.5
W	.7	1.3	2.1	2.5	1.4							8.0	10.6
WNW	.3	.8	2.0	1.2	.1							4.4	8.8
NW	.3	.5	.1									1.4	6.3
NNW	.3	.2	.3	.2		.1						1.3	8.3
VARBL	3.7	.3										4.0	2.2
CALM												1.2	
	18.5	26.0	30.6	18.6	4.5	.7		.1				100.0	7.7

TOTAL NUMBER OF OBSERVATIONS 867

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

UCT
MONTH

ALL WEATHER
CLASS

1500-1700
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.9	.8	.8	.3								2.8	6.1
NNE	.3	1.5	1.9	1.5	.1							5.3	8.6
NE	1.7	2.6	1.7	1.5								7.5	6.3
ENE	2.4	1.4	.9									4.6	4.3
E	4.5	4.2	1.1									9.8	4.0
ESE	.9	.2	.1									1.2	3.4
SE	1.0	.2	.1	.1								1.5	3.5
SSE	1.2	.1										1.4	2.3
S	3.1	3.8	2.9	.1								10.0	5.1
SSW	2.4	4.3	4.9	1.7								13.2	6.6
SW	2.7	3.3	4.8	3.2	.9	.1						14.9	8.3
WSW	.8	2.3	2.6	2.4	.3	.1						8.5	8.8
W	.8	.9	1.7	2.5	.7							6.6	10.2
WNW	.6	.9	2.3	.2	.1							4.2	7.6
NW	.3	1.2	1.2									2.8	6.1
NNW	.1	.5	.6	.1								1.2	6.3
VARBL	.7	.3										1.0	2.4
CALM												3.4	
	24.4	28.5	27.6	13.7	2.1	.2						100.0	6.5

TOTAL NUMBER OF OBSERVATIONS

884

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS UCT MONTH
ALL WEATHER CLIM 1800-2000 HOURS (L.S.T.)
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.4	1.0	1.1	.1								2.8	6.0
NNE	1.5	1.5	1.7	1.1								5.8	6.6
NE	2.7	3.6	2.0	.5								9.8	4.9
ENE	4.1	3.3	.2									7.6	3.5
E	3.1	2.7										5.8	3.3
ESE	1.9	.5										2.4	2.3
SE	.9	.1										1.0	1.9
SSE	1.1	.7										1.8	2.8
S	5.4	4.1	1.5	.5								11.4	4.3
SSW	3.1	4.1	5.9	1.5								14.5	6.3
SW	2.1	2.8	3.6	2.8	.5							11.9	8.0
WSW	2.1	1.6	1.8	1.1	.3							7.0	7.0
W	.5	1.2	.3	1.0	.3							3.4	8.7
WNW	.2	.3	.7	.3	.1							1.7	8.2
NW	.1	.6	.6	.3								1.6	7.6
NNW	.3	.6	.5	.1								1.5	5.5
VARBL	1.5											1.5	1.5
CALM												8.7	
	32.2	28.6	19.9	9.4	1.2							100.0	5.1

TOTAL NUMBER OF OBSERVATIONS 885

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS UCT
ALL WEATHER CLAS 2100-2300 HOURS (L.S.T.)
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7	.2	.3	.1								1.4	4.8
NNE	3.3	2.0	1.4	.2								7.0	4.7
NE	5.0	6.8	1.4	.8								13.9	4.6
ENE	5.2	3.6	.1									8.9	3.1
E	2.5	1.5										4.0	2.9
ESE	1.2	.1										1.4	1.8
SE	1.0											1.0	1.4
SSE	1.4	.3										1.7	2.5
S	4.0	3.8	2.4	.2								10.4	4.9
SSW	3.7	5.0	6.3	1.7								16.7	6.4
SW	2.3	3.1	2.9	1.8	.3							10.4	7.1
WSW	1.2	.7	1.6	1.6	.3							5.4	8.4
W	.2	.9	.9	.3								2.4	7.3
WNW	.2	.7	.3	.2	.2							1.7	7.9
NW	.3	.3	.5	.3								1.5	7.0
NNW	.6	.5	.1	.1								1.2	4.2
VARBL	.9	.1										1.0	2.0
CALM												10.1	
	33.7	29.5	18.2	7.6	.9							100.0	4.8

TOTAL NUMBER OF OBSERVATIONS 885

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

NOV
MONTH

ALL WEATHER
CLASS

0000-0200
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	≥56	%	MEAN WIND SPEED
N	1.1	.7										1.8	3.1
NNE	2.2	3.0	2.4	1.0	.4							6.9	6.6
NE	4.9	3.7	.8	.1								9.6	3.8
ENE	4.5	1.3	.4									6.1	3.0
E	2.4	.5										2.9	2.4
ESE	1.8											1.8	2.0
SE	.6	.1										.7	2.8
SSE	1.2	.1										1.3	1.8
S	4.5	3.9	2.9	1.3	.6							13.1	6.0
SSW	3.3	4.8	6.1	3.1	.7							18.1	7.4
SW	1.3	2.4	3.1	4.5	1.2	.6						13.1	10.5
WSW	.8	1.0	2.3	1.6	.8							6.5	9.4
W	.6	.4	1.2	.5	.4	.1						3.1	9.3
WNW	.2	1.0	.6	.1								1.9	5.9
NW		1.1	.6	.1								1.8	6.3
NNW	.4	.4	.1	.1								1.0	5.1
VARBL	1.4											1.4	1.5
CALM												6.4	
	31.2	24.3	20.6	12.4	4.1	.7						100.0	6.1

TOTAL NUMBER OF OBSERVATIONS

830

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS NOV MONTH
0300-0500 HOURS (L.S.T.)

ALL WEATHER CLASS

CONDITION

SPEED (KNTS) DIR.	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	≥56	%	MEAN WIND SPEED
N	1.0	.6	.5									2.1	4.4
NNE	2.6	2.1	2.4	.8								7.9	5.8
NE	4.9	3.3	1.3	.5								10.0	4.4
ENE	2.6	2.1	.8									5.5	4.0
E	3.4	.8	.2									4.5	2.6
ESE	1.8	.1										1.9	1.9
SE	.9											.9	1.9
SSE	.3	.3										1.1	2.5
S	2.6	3.4	3.7	.8								10.5	5.9
SSW	2.6	4.7	5.4	6.8	.9	.1						20.5	8.7
SW	2.2	2.3	3.0	3.8	1.0	.5	.2					12.9	9.7
WSW	1.6	1.8	2.3	1.3	.1							7.1	7.2
W	.7	.7	1.0	1.1	.3	.1						4.0	9.5
WNW		.2	.8	.1								1.1	7.8
NW	.3	.1	.2									.7	4.7
NNW		.3	.2									.6	6.0
VARBL	1.6											1.6	1.5
CALM												7.1	
	29.9	22.9	21.7	15.1	2.4	.7	.2					100.0	6.1

TOTAL NUMBER OF OBSERVATIONS 874

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

NOV
MONTH

ALL WEATHER
CLASS

0600-0800
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.2	.3	.7	.2								2.4	5.0
NNE	1.5	1.5	2.4	.9								6.3	6.7
NE	4.1	3.9	.9	.5								9.4	4.5
ENE	4.3	2.1	.8									7.1	3.5
E	3.3	.6	.6									4.5	2.8
ESE	1.4	.3										1.7	2.1
SE	.7	.1										.8	1.7
SSE	.5	.3										.8	2.6
S	2.8	3.7	3.7	1.2	.1							11.4	6.1
SSW	1.7	4.7	7.8	5.9	.6	.1						20.8	8.6
SW	1.2	3.6	3.6	4.1	1.3	.8						14.5	10.1
WSW	1.3	1.3	1.8	2.0	.5		.1					6.9	9.0
W	.6	.7	1.2	.7								3.1	7.7
WNW	.2	.3	.6	.2								1.4	6.6
NW	.1	.1	.3									.6	5.6
NNW	.7	.2	.1									1.0	3.4
VARBL	2.3											2.3	1.7
CALM												4.8	
	27.7	23.8	24.5	15.7	2.4	.9	.1					100.0	6.4

TOTAL NUMBER OF OBSERVATIONS

869

2
DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

NOV
MONTH

ALL WEATHER
CLASS

0900-1100
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7	.5	.5	.4								2.0	6.4
NNE	.8	.8	1.6	1.8								5.0	8.3
NE	1.9	3.5	1.4	.9								7.7	5.9
ENE	3.6	2.0	.8									6.4	3.9
E	2.3	1.9	1.1									5.3	4.2
ESE	.9	.8	.1									1.9	3.5
SE	.8	.1	.1									1.1	2.7
SSE	.2		.1									.4	4.3
S	1.8	2.6	3.8	1.9								10.0	7.2
SSW	1.4	4.3	8.2	6.6	.4	.1						21.0	9.1
SW	1.5	3.5	5.3	5.3	2.5	.7						18.8	10.5
WSW	1.2	1.8	1.2	2.1	.4	.1						6.7	9.0
W	.4	.5	1.6	2.0	.1	.2						4.8	10.5
WNW	.2	.2	.7	.1	.1							1.4	7.8
NW	.2	.4	.2	.4								1.2	6.9
NNW	.4	.4	.1									.8	4.3
VARBL	2.0	.2										2.2	1.8
CALM												3.4	
	20.4	23.4	26.8	21.3	3.4	1.2						100.0	7.3

TOTAL NUMBER OF OBSERVATIONS

853

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

NOV
MONTH

ALL WEATHER
CLASS

1200-1400
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	1.3	.2	.6								2.7	6.5
NNE	1.2	1.5	2.4	1.4	.2							6.7	8.0
NE	1.3	1.9	1.9	.5								5.6	6.1
ENE	1.2	2.0	.7	.1								4.0	4.8
E	2.0	1.3	1.5	.1								5.0	4.8
ESE	.5	1.3	.2									2.1	4.8
SE	.4	.2										.6	3.4
SSE	.9	.6										1.5	3.0
S	2.0	2.6	2.4	1.5	.5							9.0	7.4
SSW	1.7	4.6	6.7	5.7	.8							19.5	8.8
SW	.3	2.1	5.4	5.9	2.4	.5						17.1	11.4
WSW	1.4	1.1	1.7	3.0	1.1	.5						8.6	10.7
W	.4	1.1	2.8	.4	.2	.1						7.9	10.5
WNW	.4	.2	1.8	.9								3.3	8.7
NW	.1	.4	.7	.1								1.3	7.2
NNW	.1	.2										.4	4.0
VARBL	2.0	.1										2.1	1.9
CALM												2.6	
	16.9	22.6	28.6	22.7	5.3	1.2	.1					100.0	8.2

TOTAL NUMBER OF OBSERVATIONS

846

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 67-76

NDV

ALL WEATHER

1500-1700
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	≥56	%	MEAN WIND SPEED
N	1.8	1.1	.8	.6								4.2	5.2
NNE	2.5	2.5	2.0	.9	.2							8.1	6.4
NE	2.1	1.6	1.3	.2								5.3	3.8
ENE	2.8	1.9	.4									5.1	3.5
E	2.8	2.7	.4									5.9	3.7
ESE	1.4	1.2										2.6	3.4
SE	.9	.5										1.6	2.6
SSE	1.2	.7										1.9	3.1
S	2.6	3.5	3.6	1.4	.2							11.6	6.7
SSW	1.3	2.8	5.5	4.2	.8							14.7	9.2
SW	1.1	2.0	2.8	6.0	2.2	.1						14.2	11.2
WSW	1.2	2.4	2.5	2.9	1.3							10.2	9.6
W	.6	1.1	1.9	2.0	.1	.2						5.9	9.2
WNW		.6	1.1	.2								1.9	8.0
NW		.6	.6	.2								1.6	7.9
NNW	.1	.5	.1									.7	4.8
VARBL	1.9	.1										2.6	2.2
CALM												3.1	
	24.2	25.6	22.9	18.8	6.9	.4						100.0	7.2

TOTAL NUMBER OF OBSERVATIONS

940

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

NOV
MONTHS

ALL WEATHER
CLASS

1800-2000
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 14	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	2.4	.7	.5	.2								3.8	3.7
NNE	2.4	2.0	1.6	.6	.2							6.8	5.8
NE	3.0	3.5	.8	.5								8.3	4.4
ENE	3.2	1.6	.2									5.1	3.2
E	3.8	2.7	.2									6.7	3.5
ESE	1.7	.8										2.5	2.8
SE	.6	.7										1.3	3.5
SSE	1.5	.3										1.8	2.9
S	2.7	4.4	2.3	2.0	.1							11.4	6.4
SSW	2.5	3.9	6.6	3.1	.5							18.6	8.5
SW	1.4	2.4	2.9	6.0	.8							13.5	10.0
WSW	.7	2.1	2.2	1.4	.3	.3						7.1	9.1
W	.3	1.0	1.2	1.0	.1							3.7	8.8
WNW		.6	.7	.2	.3							1.8	9.7
NW		.2	.2									.5	7.5
NNW	.1	.6	.1		.1							.9	6.5
VARBL	.9	.3										1.3	2.4
CALM												4.7	
	28.0	27.9	19.5	17.0	2.5	.3						100.0	6.4

TOTAL NUMBER OF OBSERVATIONS 865

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

NOV
MONTH

ALL WEATHER
CLAM

2100-2300
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 5	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	1.4	.6	.2	.1								2.3	3.7
NNE	2.9	3.6	1.9	.7	.4							9.2	5.7
NE	4.4	3.6	.6									8.4	3.7
ENE	3.6	1.6	.6									5.6	3.3
E	3.0	.9	.1									4.1	2.9
ESE	2.2	.3										3.0	2.5
SE	1.1	.2										1.3	1.9
SSE	1.1	.1	.1									1.3	2.2
S	4.7	4.1	6.0	1.6	.2							14.4	5.9
SSW	1.2	4.7	6.0	4.6	.6							16.8	8.6
SW	1.3	2.1	4.6	4.0	.7	.1						12.7	9.5
WSW	1.3	1.9	2.9	1.3	.6	.2	.1					8.3	8.7
W	.7	.2	.4	.5	.4	.1						2.2	9.2
WNW	.1	.3	.4	.4								1.3	7.8
NW	.2	.6	.1	.5								1.4	7.2
NNW	.5	.6	.1									1.2	4.2
VARB	1.6											1.6	1.5
CALM												4.9	
	31.3	25.4	21.8	13.2	2.8	.5	.1					100.0	6.1

TOTAL NUMBER OF OBSERVATIONS

857

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN API GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

DEC
MONTH

ALL WEATHER
CLASS

0000-0200
HOURS (L.S.T.)

CONDITION

SPEED (KNOTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.8	.6	.2									1.6	3.9
NNE	1.4	2.7	1.9	.9								7.0	6.5
NE	4.2	4.9	2.1	.9	.1	.1						12.3	5.4
ENE	3.2	4.2	.8	.1								8.3	4.2
E	1.6	2.6	.1									4.3	3.7
ESE	1.5	.5										1.9	2.6
SE	1.0											1.0	2.0
SSE	.9	.3										1.3	2.5
S	3.3	4.5	2.7	.9								11.4	5.5
SSW	2.4	4.8	7.9	3.9	.3							19.3	7.8
SW	1.6	2.2	3.1	3.6	.9	.1						11.3	9.1
WSW	.8	1.5	1.5	1.8	.3	.1						6.1	9.3
W	.8	.7	1.0	.9								3.6	7.6
WNW	.2	.5	.7	.3								1.7	7.9
NW	.2		.3	.3	.1	.1						1.1	11.2
NNW	.3	.6										.9	3.5
VARBL	1.1											1.1	1.5
CALM												5.7	
	25.5	30.5	22.4	13.6	1.8	.5						100.0	6.1

TOTAL NUMBER OF OBSERVATIONS

875

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT

67-76
YEARS

DFC
MONTH

ALL WEATHER
CLASS

0300-0500
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.3	.4	.4									1.2	5.1
NNE	1.4	2.7	2.1	.7								6.9	6.1
NE	4.6	5.4	1.4	.8	.2							12.4	5.1
ENE	4.6	3.9	1.0									9.4	3.8
E	3.0	1.0										4.0	2.6
ESE	1.6	.4	.1									2.1	3.0
SE	.7											.7	2.2
SSE	1.0											1.0	2.0
S	3.4	4.6	2.7	.4	.2							11.3	5.4
SSW	2.1	5.0	7.2	4.9	.6							19.8	8.2
SW	2.1	2.2	3.4	3.9	.4							12.1	8.6
WSW	.6	.9	1.6	1.2	.7							4.9	9.4
W	.1	.6	1.2	.7	.2	.2						3.0	10.3
WNW	.1	.3	.9	.4	.1	.1						2.0	9.5
NW		.6	.4									1.0	6.8
NNW	.6	.4	.4									1.4	5.2
VARBL	.6	.1										.7	2.3
CALM												6.1	
	26.6	28.5	23.0	13.0	2.4	.3						100.0	6.1

TOTAL NUMBER OF OBSERVATIONS

901

2
DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

DEC
MONTH

ALL WEATHER
CLASS

0600-0800
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7	.2	.3	.1								1.3	6.6
NNE	1.8	1.8	2.4	.9								6.8	6.5
NE	4.0	4.3	2.5	.8								11.5	5.2
ENE	4.3	3.5	1.0									8.7	3.9
E	2.8	1.1	.3									4.3	3.3
ESE	1.8	.6										2.4	2.5
SE	.7	.1										.8	2.3
SSE	1.3	.3										1.7	2.5
S	3.0	3.7	3.1	1.3		.1						11.3	6.2
SSW	2.1	5.4	7.5	5.5	.7							21.2	8.3
SW	1.8	2.7	3.8	3.8	1.0							13.1	9.0
WSW	.8	.9	1.1	1.2	.8							4.8	9.7
W	.1	.3	.8	.7	.2	.1						2.2	10.5
WNW		.2	.8	.3								1.3	9.2
NW		.8		.4								1.2	7.7
NNW	.3	.2	.1									.7	4.3
VARBL	.9	.1										1.0	1.9
CALM												5.6	
	26.4	26.2	23.7	15.1	2.7	.2						100.0	6.3

TOTAL NUMBER OF OBSERVATIONS

893

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

35032 RHEIN-MAIN APT GERMANY/FRANKFURT

67-76

DFC

STATION

STATION NAME

YEARS

MONTH

ALL WEATHER

CLASS

0900-1100

HOURS (L S T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.7	.8	.1	.1								1.7	4.6
NNE	1.8	1.8	1.8	1.6								6.9	6.7
NE	2.7	2.8	3.1	1.0								9.6	6.1
ENE	3.8	4.6	.6									8.9	3.8
E	2.6	1.7	.8									5.0	3.8
ESE	1.3	.9	.1									2.3	3.5
SE	.7	.7	.1									1.5	3.8
SSE	1.1	.4	.1									1.7	3.1
S	2.2	2.7	2.8	.8	.1							9.6	6.0
SSW	1.6	5.1	9.2	3.9	1.1							20.9	8.6
SW	1.3	3.5	4.7	5.6	.6		.1					15.7	9.4
WSW	1.0	.9	2.1	1.9	.6	.1						6.6	9.6
W	.1	1.1	.8	.6	.1							2.7	8.3
WNW	.1	.1	.3	.8								1.3	9.6
NW	.1	.7	1.0	.3								2.1	7.4
NNW		.2	.3	.1								.7	8.2
VARBL	1.0	.2										1.2	2.5
CALM												2.6	
	22.1	28.1	27.9	16.6	2.5	.1	.1					100.0	6.9

TOTAL NUMBER OF OBSERVATIONS

896

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS DEC NORTH
ALL WEATHER CLASS 1200-1400 HOURS (LST)
CONDITION

SPEED (KNTS) DIR.	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	≥56	%	MEAN WIND SPEED
N	.7	.6	.6	.1								1.9	5.2
NNE	1.4	1.8	1.6	2.4								7.1	7.5
NE	2.0	3.3	2.9	1.6								9.9	6.6
ENE	2.4	4.2	1.9	.2								8.7	5.0
E	2.0	3.2	.6	.1								5.9	4.4
ESE	1.0	1.6										2.6	3.9
SE	.6	.1										.7	2.5
SSE	.2	.2										.5	4.0
S	1.8	1.9	2.8	.6	.1							7.3	6.2
SSW	1.2	4.9	7.4	4.8	.3							18.6	8.3
SW	.2	2.8	6.3	4.5	1.1	.1						15.2	10.0
WSW	1.1	1.5	2.0	2.7	1.2	.2						8.8	10.3
W	.2	.1	1.2	1.0	.3							2.9	10.7
WNW	.1	.2	1.2	.2								1.8	8.2
NW		.5	1.1	.7	.2							2.5	10.0
NNW	.2	.3	.3	.1	.1							1.1	7.2
VARBL	1.1	.2										1.4	2.3
CALM												3.1	
	16.4	27.4	30.2	19.0	3.5	.3						100.0	7.4

TOTAL NUMBER OF OBSERVATIONS 882

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SURFACE WINDS

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

DEC
MONTH

ALL WEATHER
CLAS

1500-1700
HOURS (L.S.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.9	.9	.2	.3								2.3	5.1
NNE	1.4	1.8	2.9	1.8								7.9	7.5
NE	3.7	4.1	1.7	.4								9.9	4.8
ENE	3.7	2.6	.9									7.1	3.7
E	3.7	3.3	.4									7.4	3.7
ESE	1.1	1.0	.2									2.3	3.7
SE	.8	.2										1.0	2.8
SSE	.9	.2										1.1	2.4
S	2.3	4.2	2.4	.4								9.4	5.4
SSW	1.1	4.2	7.9	4.8	.2							18.2	8.7
SW	1.4	3.4	4.3	4.9	.6							14.7	8.8
WSW	1.0	1.2	1.6	2.0	.6							6.3	9.4
W	.6	1.0	.9	.8	.4	.1						3.8	9.3
WNW	.1	.2	1.1	.4								1.9	8.8
NW	.1	.7	1.3	.2								2.3	7.7
NNW	.2	.6	.4	.2								1.4	6.1
VARBL	.7											.7	1.8
CALM												2.2	
	23.6	29.6	26.3	16.3	1.8	.1						100.0	6.6

TOTAL NUMBER OF OBSERVATIONS

901

2
DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35022 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS DEC MONTH
ALL WEATHER CLUB 1800-2000 HOURS (LST T.)
CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.8	.6	.8									2.2	5.4
NNE	1.4	3.2	3.7	1.2	.2							9.8	7.1
NE	2.2	4.9	2.0	.9								10.0	5.6
ENE	3.6	1.9	.3									5.9	3.5
E	2.8	3.1	.1	.1								6.1	3.6
ESE	1.9	.6										2.5	2.5
SE	1.1	.2										1.4	2.4
SSE	1.1	.3										1.5	2.5
S	3.4	3.5	3.1	.1								10.1	5.0
SSW	2.5	4.4	7.2	5.2	.5	.1						19.9	8.4
SW	1.1	3.3	3.4	4.1	.7	.1						12.7	9.0
WSW	.7	1.1	1.5	1.0	.5	.1						4.9	9.0
W	.2	.6	1.2	.8	.2							3.1	9.4
WNW	.1	.8	.7	.3	.2							2.2	8.5
NW	.1	.3	1.1	.1								1.7	7.5
NNW	.1	.3										.5	4.0
VARBL	1.0											1.0	1.7
CALM												4.7	
	24.3	29.2	25.2	14.0	2.3	.3						100.0	6.3

TOTAL NUMBER OF OBSERVATIONS 880

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

DEC
MONTH

ALL WEATHER
CLASS

2100-2300
HOURS (L.T.T.)

CONDITION

SPEED (KNTS) DIR.	1 - 3	4 - 6	7 - 10	11 - 16	17 - 21	22 - 27	28 - 33	34 - 40	41 - 47	48 - 55	≥ 56	%	MEAN WIND SPEED
N	.6	.6	.6									1.7	5.1
NNE	.7	2.8	2.4	.6								6.4	6.5
NE	4.2	4.8	2.4	1.4								12.7	5.4
ENE	4.1	3.4	.6									8.0	3.8
E	2.7	2.0										4.7	3.0
ESE	1.1	.8	.1									2.0	3.3
SE	.9	.3										1.2	2.4
SSE	1.2	.1	.1									1.5	2.2
S	3.9	3.8	3.3	.5								11.5	5.1
SSW	2.1	7.4	7.3	4.5	.3							21.7	7.5
SW	1.2	3.0	3.5	2.8	1.4							11.9	9.1
WSW	.7	.9	1.2	1.1	.8							4.7	9.9
W	.2	.6	1.6	.7	.2							3.4	9.5
WNW	.5	.1	.6	.5	.1							1.2	6.2
NW		.5	.8	.5								1.7	9.0
NNW	.5	.1	.5									1.0	5.2
VARBL	.7											.7	1.8
CALM												3.8	
	25.2	31.3	24.8	11.9	2.9							100.0	6.2

TOTAL NUMBER OF OBSERVATIONS

888

2
DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF WIND
DIRECTION AND SPEED
(FROM HOURLY OBSERVATIONS)

SURFACE WINDS

25032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT YEARS 67-70, 73-76 ALL NORTH

INSTRUMENT CIG 200 TO 1400 FT W/ VSBY 1/2 MI OR MORE,

ALL HOURS (L.S.T.)

AND/OR VSBY 1/2 TO 2-1/2 MI W/CIG 200 FT OR MORE

SPEED: (KNTS) DIR.	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	≥56	%	MEAN WIND SPEED
N	1.1	.6	.3	.0								2.0	3.7
NNE	2.4	2.1	1.7	1.0	.1							7.3	6.0
NE	5.6	4.8	1.2	.1	.0							11.8	4.0
ENE	5.1	3.5	.3									8.9	3.3
E	4.0	2.5	.2									6.7	3.2
ESE	1.8	.7	.1									2.6	2.7
SE	.8	.3										1.1	2.5
SSE	1.2	.4		.0								1.6	2.5
S	3.8	3.3	2.8	.3	.0							10.2	5.0
SSW	2.7	5.0	6.1	2.7	.2	.0						16.7	7.1
SW	2.1	3.4	2.3	1.1	.3	.0						9.2	6.6
WSW	1.6	1.4	.8	.2	.1		.0					4.1	5.1
W	.6	.7	.3	.1	.0	.0						1.6	5.2
W ^{1/2} N	.3	.4	.2	.1								.9	5.2
NW	.2	.1	.2	.0		.0						.6	5.9
NNW	.3	.1	.1	.1								.6	4.9
VARBL	3.7	.1										3.8	1.8
CALM												10.3	
	37.3	29.5	16.5	5.8	.6	.1	.0					100.0	4.4

TOTAL NUMBER OF OBSERVATIONS 7416

U S AIR FORCE
ENVIRONMENTAL TECHNICAL
APPLICATIONS CENTER

PART D

CEILING VERSUS VISIBILITY

This summary is a bivariate percentage frequency distribution by classes of ceiling from zero to equal to or greater than 20,000 feet and as a separate class "no ceiling", versus visibility in 16 classes from zero to equal to or greater than 10 miles. Data are derived from hourly observations, and three sets of tables are presented as follows:

1. Annual - all years and all hours combined
2. By month - all years and all hours combined
3. By month - by standard 3-hour groups

Due to the cumulative nature of this presentation, it is possible to determine the percentage frequency of occurrence for any given limit of ceiling or visibility separately, or in combination of ceiling and visibility. The totals progress to the right and downward. Ceiling may be determined independently by referring to totals in the extreme right hand column. Also, visibility may be determined independently by reference to the horizontal row of totals at the bottom of the page. The percentage frequency for which the station was meeting or exceeding any given set of minima may be determined from the figure at the intersection of the appropriate ceiling column and visibility row. Several examples in the use of these tables are shown on pages 2 and 3 below.

U. S. Weather Bureau and Navy stations did not report ceilings within the range 10,000 feet and higher prior to January 1949. Summaries prepared from data for these stations using the earlier period and data subsequent to January 1949 will be modified to limit ceilings to 10,000 feet. Short periods of record prior to 1949 for these stations will be eliminated from the summary. For Air Force stations, the "no ceiling" category includes clear and scattered conditions, and ceilings above 20,000 feet for period through June 1948. Beginning in July 1948 for Air Force stations and January 1949 for USWB and U. S. Navy stations the "no ceiling" category consists of observations with less than 6/10 total sky cover and those cases where total sky cover is 6/10 or more, but not more than 1/2 of the sky cover is opaque.

Beginning in January 1968, METAR stations report visibilities to 6 miles and then greater than 6 miles. Thus, for METAR stations, the category equal to or greater than 10 miles is not printed in the tables, unless the summary was for a period ending before January 1968.

Continued on Reverse Side

EXAMPLES FOR USE OF CEILING VERSUS VISIBILITY TABLES IN THIS TABULATION

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	$\geq 2\frac{1}{2}$	≥ 2	$\geq 1\frac{1}{2}$	$\geq 1\frac{1}{4}$	≥ 1	$\geq \frac{3}{4}$	$\geq \frac{1}{2}$	$\geq \frac{1}{4}$	$\geq \frac{1}{8}$	$\geq \frac{1}{16}$	≥ 0
NO CEILING																
≥ 1800																
≥ 1500					91.0											92.6
≥ 1200																
≥ 1000																
≥ 900																
≥ 800																
≥ 700																
≥ 600																
≥ 500										97.4						98.1
≥ 400																
≥ 300																
≥ 200																
≥ 100																
≥ 0					95.4		96.9			98.3						100.0

- EXAMPLE # 1** Read ceiling values independently of visibility under column at right headed ≥ 0 .
For instance, from the table: Ceiling ≥ 1500 feet = 92.6%.
Ceiling ≥ 500 feet = 98.1%.
- EXAMPLE # 2** Read visibilities independently of ceilings on bottom line opposite ≥ 0 . From the table:
Visibility ≥ 3 miles = 95.4%.
Visibility ≥ 2 miles = 96.9%.
Visibility ≥ 1 mile = 98.3%.
- EXAMPLE # 3** To obtain combinations of ceiling with visibility, read figure at intersection of the two categories; i.e.: Ceiling ≥ 1500 feet with visibility ≥ 3 miles = 91.0%.

ADDITIONAL EXAMPLES

EXAMPLE # 4 Values below minimums stated in the table may be obtained by subtracting the value given in the table from 100%. Thus, to obtain the percentage of observations with ceiling < 1500 feet and/or visibility < 3 miles, subtract the value read from the table at the intersection, which is 91.0, from 100.0. The answer 9.0 is the percentage of observations with ceiling < 1500 feet and/or visibility < 3 miles.

Likewise, the percentage of observations with ceiling < 500 feet and/or visibility < 1 mile is 2.6, obtained by subtracting 97.4 from 100.0.

EXAMPLE # 5 To find the percentage of observations falling within the two categories given in example above, subtract the value read from the table for the first set of limits from the value in the table for the second set of limits. The difference will be the percentage of observations meeting the lower set of limits, but not meeting the higher set of limits.

The value 91.0 read from the table at the intersection of ≥ 1500 feet with ≥ 3 miles, subtracted from 97.4 read from the table at the intersection of ≥ 500 feet with ≥ 1 mile is equal to 6.4%. Thus; 6.4 percent of the observations meet the criteria: "ceiling ≥ 500 feet with visibility > 1 mile, but < 3 miles; or ceiling ≥ 500 feet, but < 1500 feet with visibility ≥ 1 mile."

Since these tabulations are prepared in several ways including by month, by 3-hour groups it is possible to determine diurnal variations of ceiling and visibility limits as well as probabilities of various ceiling-visibility combinations.

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35C32 RHEIN-MAIN APT GERMANY/FRANKFURT 67-76

ALL

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

ALL

CEILING (FEET)	VISIBILITY STATUTE MILES															
	≥10	≥6	≥5	≥4	≥3	≥2.5	≥2	≥1.5	≥1	≥0.5	≥0.25	≥0.15	≥0.1	≥0.05	≥0.025	≥0
NO CEILING		26.2	27.9	30.5	33.5	34.3	35.0	36.1	36.4	36.6	36.7	36.8	36.8	36.8	36.9	37.0
≥ 20000		31.7	33.8	36.9	40.4	41.4	42.3	43.5	44.0	44.2	44.3	44.4	44.5	44.5	44.6	44.7
≥ 18000		31.8	33.9	37.0	40.5	41.5	42.5	43.8	44.1	44.4	44.5	44.5	44.6	44.6	44.7	44.8
≥ 16000		31.8	33.9	37.0	40.6	41.6	42.5	43.8	44.1	44.4	44.5	44.6	44.6	44.6	44.7	44.8
≥ 14000		32.4	34.6	37.8	41.3	42.4	43.3	44.6	45.0	45.2	45.3	45.4	45.4	45.5	45.5	45.7
≥ 12000		34.3	36.7	40.1	43.9	45.0	46.0	47.3	47.7	48.0	48.1	48.1	48.2	48.3	48.3	48.4
≥ 10000		37.0	39.6	43.4	47.6	48.9	49.9	51.4	51.8	52.0	52.2	52.2	52.3	52.4	52.4	52.5
≥ 9000		38.2	41.0	44.9	49.3	50.6	51.6	53.1	53.3	53.8	53.9	54.3	54.1	54.1	54.2	54.3
≥ 8000		39.0	41.8	45.9	50.3	51.7	52.8	54.3	54.3	55.0	55.1	55.2	55.3	55.3	55.4	55.5
≥ 7000		40.6	43.5	47.7	52.3	53.7	54.8	56.4	56.3	57.0	57.1	57.2	57.4	57.5	57.5	57.6
≥ 6000		43.1	46.2	50.6	55.5	56.9	58.1	59.8	60.3	60.6	60.7	60.8	60.8	60.9	60.9	61.1
≥ 5000		46.0	49.3	54.0	59.2	60.8	61.1	62.9	64.4	64.7	64.8	64.9	65.0	65.1	65.1	65.2
≥ 4500		47.9	51.3	56.2	61.6	63.2	64.6	66.0	67.3	67.4	67.5	67.6	67.7	67.7	67.8	67.8
≥ 4000		50.6	54.3	59.4	65.3	67.0	68.5	70.0	71.5	71.4	71.5	71.6	71.7	71.8	71.8	71.9
≥ 3500		52.5	56.4	61.8	68.0	69.8	71.3	72.8	74.4	74.4	74.5	74.5	74.7	74.8	74.8	74.9
≥ 3000		55.0	59.1	64.9	71.4	73.4	75.1	76.7	78.0	78.4	78.5	78.5	78.7	78.8	78.8	79.0
≥ 2500		56.9	61.3	67.5	74.4	76.6	78.4	80.8	81.9	81.9	82.1	82.2	82.3	82.4	82.4	82.5
≥ 2000		58.5	63.4	70.0	77.4	79.8	81.7	84.4	85.5	85.5	85.6	85.7	85.8	85.8	85.9	86.1
≥ 1800		59.0	64.2	70.9	78.6	81.0	82.9	85.7	86.4	86.9	87.0	87.1	87.2	87.3	87.3	87.5
≥ 1500		60.3	65.4	72.4	80.5	83.0	85.1	88.1	88.8	89.4	89.5	89.5	89.7	89.8	89.9	90.0
≥ 1200		61.0	66.0	73.4	81.9	84.5	86.7	89.9	90.7	91.3	91.5	91.6	91.7	91.8	91.8	91.9
≥ 1000		61.2	66.2	73.7	82.5	85.3	87.6	91.0	91.8	92.4	92.6	92.7	92.8	92.9	92.9	93.1
≥ 900		61.2	66.3	73.8	82.7	85.3	87.9	91.3	92.2	92.8	92.9	93.1	93.2	93.3	93.3	93.4
≥ 800		61.2	66.3	74.0	83.0	85.8	88.3	91.9	92.8	93.4	93.6	93.7	93.8	93.9	93.9	94.1
≥ 700		61.2	66.4	74.1	83.2	86.1	88.6	92.3	93.3	93.9	94.1	94.2	94.3	94.4	94.5	94.6
≥ 600		61.2	66.4	74.2	83.4	86.4	89.0	92.8	93.8	94.5	94.7	94.8	95.0	95.1	95.1	95.3
≥ 500		61.3	66.4	74.2	83.6	86.6	89.3	93.3	94.4	95.1	95.4	95.6	95.7	95.8	95.8	96.0
≥ 400		61.3	66.4	74.2	83.6	86.7	89.5	93.7	94.9	95.7	96.1	96.3	96.4	96.5	96.6	96.7
≥ 300		61.3	66.4	74.2	83.7	86.8	89.6	94.1	95.4	96.3	96.9	97.2	97.4	97.6	97.6	97.8
≥ 200		61.3	66.4	74.2	83.7	86.8	89.6	94.2	95.6	96.8	97.3	97.6	97.9	98.2	98.3	98.5
≥ 100		61.3	66.4	74.2	83.7	86.8	89.6	94.2	95.6	96.8	97.4	97.7	98.0	98.4	98.6	99.2
≥ 0		61.3	66.4	74.2	83.7	86.8	89.6	94.2	95.6	96.8	97.4	97.8	98.1	98.6	98.8	100.0

TOTAL NUMBER OF OBSERVATIONS 81458

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35022 RHEIN-MAIN APT GERMANY/FRANKFURT 67-78

JA

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

CEILING (FT)	VISIBILITY STATUTE MILES															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/8	≥ 1/16	≥ 0
NO CEILING		9.1	10.1	11.0	14.2	15.2	16.0	17.6	18.1	18.6	18.8	19.1	19.2	19.3	19.4	19.5
≥ 20000		11.0	12.5	14.4	17.4	18.7	19.7	21.8	22.4	23.0	23.3	23.7	23.9	24.1	24.1	24.2
8000		11.1	12.6	14.5	17.5	18.8	19.9	22.0	22.6	23.2	23.5	23.9	24.1	24.3	24.3	24.4
≤ 16000		11.1	12.5	14.5	17.5	18.8	19.9	22.0	22.6	23.2	23.5	23.9	24.1	24.3	24.3	24.4
≥ 14000		11.3	12.9	14.9	18.0	19.3	20.4	22.5	23.1	23.7	24.0	24.4	24.6	24.8	24.8	24.9
≥ 12000		12.1	13.8	15.9	19.3	20.7	21.8	24.0	24.7	25.3	25.6	25.9	26.2	26.4	26.4	26.5
≥ 10000		13.4	15.2	17.9	21.5	23.1	24.2	26.6	27.3	27.9	28.3	28.7	28.8	29.1	29.1	29.2
≥ 9000		13.8	15.9	18.7	22.8	24.1	25.3	27.7	28.6	29.2	29.6	30.0	30.2	30.4	30.4	30.5
≥ 8000		14.3	16.4	19.3	23.3	24.9	26.2	28.7	29.5	30.1	30.3	30.5	31.1	31.3	31.3	31.5
≥ 7000		15.1	17.3	20.3	24.4	26.1	27.3	30.1	30.9	31.6	31.7	32.4	32.6	32.9	32.9	33.0
≥ 6000		16.5	18.8	21.9	26.4	28.2	29.6	32.4	33.3	34.1	34.5	34.9	35.1	35.4	35.5	35.6
≥ 5000		18.2	20.7	23.7	29.0	31.1	32.7	35.7	36.6	37.5	37.9	38.4	38.6	38.9	39.0	39.1
≥ 4500		19.6	22.2	25.6	31.0	33.1	34.9	38.1	39.1	40.0	40.4	40.9	41.1	41.4	41.5	41.6
≥ 4000		21.3	24.1	27.5	33.9	36.1	38.2	41.8	42.9	43.8	44.2	44.7	45.0	45.3	45.4	45.5
≥ 3500		23.2	26.4	30.6	37.0	39.3	41.4	45.4	46.5	47.5	48.0	48.5	48.7	49.1	49.1	49.3
≥ 3000		26.7	30.2	34.9	42.1	44.8	47.2	51.5	52.7	53.9	54.3	54.9	55.2	55.6	55.6	55.9
≥ 2500		29.7	33.5	39.0	47.2	50.3	52.9	57.7	59.0	60.2	60.7	61.3	61.6	62.0	62.0	62.2
≥ 2000		33.6	37.7	43.8	53.1	56.8	59.7	65.0	66.4	67.7	68.2	68.7	69.1	69.5	69.6	69.7
≥ 1800		35.0	39.4	45.8	55.6	59.4	62.5	68.1	69.6	70.9	71.4	72.0	72.3	72.7	72.7	72.9
≥ 1500		37.1	41.9	48.5	59.3	63.6	67.1	73.4	75.0	76.5	77.0	77.6	78.0	78.4	78.4	78.6
≥ 1200		38.3	43.4	51.0	62.3	66.8	70.4	77.2	79.1	80.6	81.2	81.8	82.2	82.6	82.6	82.8
≥ 1000		38.7	44.0	52.0	63.9	68.5	72.2	79.5	81.5	83.1	83.6	84.2	84.7	85.1	85.1	85.3
≥ 900		38.8	44.1	52.3	64.3	68.9	72.7	80.2	82.2	83.8	84.3	85.0	85.4	85.8	85.9	86.0
≥ 800		38.8	44.2	52.6	65.0	69.8	73.7	81.5	83.6	85.1	85.7	86.4	86.8	87.2	87.2	87.4
≥ 700		38.8	44.3	52.8	65.3	70.3	74.3	82.4	84.6	86.2	86.8	87.5	88.0	88.4	88.5	88.7
≥ 600		38.8	44.3	52.9	65.8	70.7	74.8	83.2	85.6	87.3	88.1	88.8	89.3	89.8	89.9	90.0
≥ 500		38.8	44.3	53.0	66.0	71.1	75.4	84.2	86.8	88.7	89.5	90.3	90.9	91.5	91.6	91.7
≥ 400		38.8	44.3	53.0	66.1	71.4	75.7	85.1	88.0	90.1	91.1	92.0	92.6	93.3	93.4	93.5
≥ 300		38.8	44.3	53.0	66.3	71.5	76.1	85.9	89.2	91.7	93.0	94.1	94.9	95.7	95.9	96.1
≥ 200		38.8	44.4	53.1	66.3	71.6	76.2	86.2	89.6	92.4	93.8	95.0	96.0	97.1	97.3	97.6
≥ 100		38.8	44.4	53.1	66.3	71.6	76.2	86.2	89.6	92.5	93.9	95.2	96.3	97.6	97.8	98.4
≥ 0		38.8	44.4	53.1	66.3	71.6	76.2	86.2	89.6	92.5	93.9	95.2	96.4	97.8	98.1	100.0

TOTAL NUMBER OF OBSERVATIONS 7064

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032 REIN-MAIN APT GERMANY/FRANKFURT 67-76

FE.

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

ALL

CEILING FEET	VISIBILITY STATUTE MILES															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥1/16	≥.	≥0
NO CEILING		17.0	18.7	22.0	26.5	27.8	26.7	30.2	30.5	30.9	31.0	31.0	31.1	31.1	31.1	31.2
≥ 20000		20.3	22.3	26.1	31.6	33.0	34.2	36.1	36.5	36.9	37.0	37.1	37.1	37.2	37.2	37.3
≥ 18000		20.3	22.4	26.1	31.6	33.1	34.3	36.2	36.6	37.0	37.1	37.1	37.2	37.3	37.3	37.4
IV 16000		20.3	22.4	26.1	31.7	33.1	34.3	36.2	36.6	37.0	37.1	37.2	37.2	37.3	37.3	37.4
IV 14000		20.7	22.8	26.6	32.2	33.7	34.9	36.9	37.3	37.7	37.8	37.9	37.9	38.0	38.0	38.1
IV 12000		21.9	24.4	28.4	34.4	35.9	37.1	39.2	39.6	40.0	40.1	40.2	40.2	40.3	40.3	40.4
IV 10000		23.1	25.8	30.1	36.6	38.3	39.5	41.6	42.1	42.6	42.7	42.7	42.8	42.8	42.8	43.0
IV 9000		23.5	26.3	30.8	37.6	39.2	40.5	42.7	43.2	43.6	43.7	43.8	43.8	43.9	43.9	44.0
IV 8000		23.8	26.6	31.2	38.1	39.8	41.0	43.3	43.8	44.3	44.4	44.4	44.5	44.5	44.5	44.7
IV 7000		24.5	27.3	32.1	39.1	40.8	42.1	44.4	45.0	45.4	45.6	45.6	45.7	45.7	45.7	45.9
IV 6000		26.1	29.2	34.2	41.4	43.2	44.5	47.0	47.5	48.0	48.2	48.2	48.3	48.3	48.3	48.5
IV 5000		28.5	31.8	37.2	44.9	46.7	48.1	50.7	51.3	51.8	52.0	52.0	52.1	52.2	52.2	52.3
IV 4500		30.7	34.2	39.8	48.0	49.9	51.4	54.1	54.8	55.3	55.5	55.5	55.6	55.6	55.7	55.9
IV 4000		33.7	37.5	43.4	52.0	54.2	55.9	58.8	59.5	60.0	60.2	60.2	60.3	60.3	60.4	60.5
IV 3500		36.4	40.4	46.5	55.5	57.8	59.6	62.5	63.2	63.8	64.0	64.0	64.1	64.1	64.1	64.3
IV 3000		39.2	43.6	50.3	59.7	62.2	64.1	67.4	68.3	68.9	69.1	69.1	69.2	69.2	69.2	69.4
IV 2500		41.6	46.5	53.8	63.9	66.8	68.9	72.6	73.5	74.2	74.3	74.4	74.5	74.5	74.5	74.7
IV 2000		44.5	49.8	57.6	69.7	71.8	74.1	78.1	79.0	79.8	80.0	80.0	80.1	80.2	80.2	80.3
IV 1800		45.4	50.8	58.7	70.2	73.6	76.2	80.4	81.4	82.1	82.4	82.4	82.5	82.6	82.6	82.7
IV 1500		46.4	52.2	60.6	72.9	76.3	79.3	84.1	85.2	86.0	86.2	86.3	86.4	86.5	86.5	86.6
IV 1200		46.5	52.8	61.5	74.4	78.2	81.5	86.7	87.9	88.8	89.0	89.1	89.2	89.3	89.3	89.4
IV 1000		47.1	53.1	62.0	75.3	79.2	82.7	88.1	89.4	90.4	90.7	90.7	90.9	90.9	90.9	91.1
IV 900		47.1	53.2	62.3	75.6	79.6	83.1	88.8	90.0	91.0	91.3	91.4	91.5	91.6	91.6	91.7
IV 800		47.2	53.2	62.3	75.8	79.8	83.4	89.2	90.6	91.6	91.9	92.0	92.2	92.2	92.2	92.4
IV 700		47.2	53.3	62.4	76.1	80.2	83.9	89.9	91.3	92.4	92.8	92.9	93.1	93.2	93.2	93.3
IV 600		47.3	53.4	62.5	76.2	80.3	84.1	90.4	91.9	93.1	93.5	93.6	93.8	93.9	93.9	94.0
IV 500		47.3	53.4	62.5	76.2	80.5	84.4	90.9	92.5	93.9	94.3	94.4	94.6	94.7	94.7	94.9
IV 400		47.3	53.4	62.5	76.3	80.6	84.6	91.4	93.0	94.5	95.0	95.3	95.6	95.7	95.7	95.8
IV 300		47.3	53.4	62.5	76.3	80.6	84.7	91.7	93.6	95.4	96.2	96.6	97.0	97.3	97.3	97.5
IV 200		47.3	53.4	62.5	76.3	80.6	84.7	91.7	93.7	95.7	96.6	97.1	97.7	98.1	98.2	98.5
IV 100		47.3	53.4	62.5	76.3	80.6	84.7	91.7	93.7	95.7	96.7	97.2	97.8	98.4	98.5	98.8
IV 0		47.3	53.4	62.5	76.3	80.6	84.7	91.7	93.8	95.8	96.8	97.5	98.2	99.0	99.1	100.0

TOTAL NUMBER OF OBSERVATIONS 6461

2

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032

RHEIN-MAIN APT GERMANY/FRANKFURT

67-76

N.A.

STATION

STATION NAME

YEARS

MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

A.I.L.
HOURS/15

CEILING (FEET)	VISIBILITY - STATUTE MILES															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥5/16	≥¼	≥0
NO CEILING		25.2	27.7	30.9	34.9	36.0	36.6	37.4	37.6	37.7	37.7	37.8	37.8	37.8	37.8	37.8
≥ 20000		29.9	33.0	37.2	42.2	43.7	44.5	45.5	45.9	45.9	46.0	46.0	46.0	46.0	46.0	46.1
≥ 18000		30.0	33.2	37.5	42.4	44.0	44.7	45.8	46.0	46.2	46.2	46.2	46.2	46.2	46.3	46.3
≥ 16000		30.0	33.2	37.5	42.4	44.0	44.7	45.8	46.0	46.2	46.2	46.2	46.2	46.3	46.3	46.3
≥ 14000		30.5	33.8	33.1	43.1	44.7	45.5	46.5	46.7	46.9	46.9	46.9	46.9	47.0	47.0	47.0
≥ 12000		31.8	35.2	39.8	45.2	46.9	47.7	48.7	49.0	49.1	49.2	49.2	49.2	49.2	49.2	49.3
≥ 10000		33.7	37.2	42.2	48.0	49.8	50.7	51.9	52.2	52.3	52.4	52.4	52.4	52.4	52.4	52.5
≥ 9000		34.5	38.1	43.2	49.2	51.0	51.9	53.2	53.5	53.6	53.6	53.7	53.7	53.7	53.7	53.8
≥ 8000		35.0	38.7	43.8	49.8	51.7	52.6	53.9	54.2	54.3	54.3	54.4	54.4	54.4	54.4	54.5
≥ 7000		36.0	39.8	45.1	51.2	53.1	54.0	55.3	55.6	55.8	55.8	55.8	55.8	55.9	55.9	56.0
≥ 6000		38.3	42.3	47.7	54.2	56.2	57.1	58.4	58.7	59.0	59.0	59.0	59.0	59.0	59.1	59.1
≥ 5000		41.2	45.7	51.5	58.3	60.3	61.4	62.8	63.1	63.3	63.4	63.4	63.4	63.5	63.5	63.5
≥ 4500		43.3	47.9	54.1	61.1	63.2	64.3	65.7	66.0	66.3	66.4	66.4	66.4	66.4	66.5	66.5
≥ 4000		47.0	52.1	58.6	66.4	68.5	69.8	71.3	71.7	71.9	72.0	72.0	72.0	72.1	72.1	72.1
≥ 3500		49.9	55.4	62.4	70.7	72.9	74.2	75.8	76.2	76.4	76.5	76.5	76.5	76.6	76.6	76.7
≥ 3000		53.1	59.0	66.6	75.4	77.7	79.2	80.9	81.2	81.5	81.6	81.6	81.6	81.7	81.7	81.7
≥ 2500		55.8	61.7	70.0	79.6	82.1	83.7	85.4	86.0	86.3	86.4	86.4	86.4	86.5	86.5	86.5
≥ 2000		57.9	64.2	73.1	83.2	85.9	87.8	89.8	90.3	90.6	90.7	90.7	90.7	90.8	90.8	90.9
≥ 1800		58.7	65.1	74.3	84.6	87.3	89.2	91.3	91.7	92.1	92.2	92.2	92.2	92.3	92.3	92.3
≥ 1500		60.0	66.5	76.0	86.6	89.6	91.5	93.7	94.1	94.5	94.6	94.6	94.6	94.7	94.7	94.8
≥ 1200		60.3	67.1	76.8	87.7	90.7	92.7	95.0	95.5	96.0	96.1	96.2	96.2	96.2	96.2	96.3
≥ 1000		60.3	67.1	76.9	88.1	91.3	93.4	95.9	96.4	96.9	97.1	97.1	97.1	97.1	97.2	97.2
≥ 900		60.4	67.2	77.0	88.2	91.5	93.7	96.1	96.6	97.2	97.3	97.4	97.4	97.4	97.4	97.5
≥ 800		60.4	67.2	77.1	88.4	91.8	94.1	96.7	97.3	97.8	97.9	98.0	98.0	98.0	98.1	98.1
≥ 700		60.4	67.2	77.1	88.5	92.0	94.3	97.0	97.5	98.1	98.2	98.3	98.3	98.3	98.4	98.4
≥ 600		60.4	67.2	77.1	88.6	92.1	94.4	97.2	97.8	98.4	98.6	98.6	98.7	98.7	98.7	98.8
≥ 500		60.4	67.2	77.1	88.6	92.1	94.5	97.3	98.0	98.6	98.8	98.8	98.9	98.9	99.0	99.0
≥ 400		60.4	67.2	77.1	88.7	92.2	94.6	97.5	98.1	98.8	99.1	99.1	99.2	99.2	99.2	99.3
≥ 300		60.4	67.2	77.1	88.7	92.3	94.8	97.7	98.3	99.1	99.4	99.5	99.6	99.6	99.6	99.7
≥ 200		60.4	67.2	77.1	88.7	92.3	94.8	97.7	98.3	99.1	99.5	99.6	99.6	99.7	99.7	99.8
≥ 100		60.4	67.2	77.1	88.7	92.3	94.8	97.7	98.3	99.1	99.5	99.6	99.7	99.7	99.8	99.9
≥ 0		60.4	67.2	77.1	88.7	92.3	94.8	97.7	98.3	99.1	99.5	99.6	99.7	99.8	99.8	100.0

TOTAL NUMBER OF OBSERVATIONS

6949

USAF ETAC

FORM
JUL 64

D-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032 RHEIN-MAIN APT GERMANY/FRAKUFPT 67-76

AP

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

ALL

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2.5	≥ 2	≥ 1.5	≥ 1.4	≥ 1	≥ .9	≥ .8	≥ .7	≥ .6	≥ .5	≥ 0
NO CEILING		38.0	39.5	42.0	44.1	44.4	44.7	45.1	45.3	45.4	45.4	45.4	45.4	45.4	45.5	45.5
≥ 20000		45.4	47.4	50.4	52.5	53.4	53.7	54.4	54.6	54.7	54.7	54.7	54.7	54.8	54.8	54.8
≥ 18000		45.6	47.6	50.6	53.1	53.6	53.9	54.6	54.8	54.9	54.9	54.9	55.0	55.0	55.0	55.0
≥ 16000		45.6	47.6	50.6	53.2	53.6	53.9	54.6	54.8	54.9	55.0	55.0	55.0	55.0	55.0	55.1
≥ 14000		46.4	48.4	51.5	54.1	54.6	54.9	55.6	55.8	55.9	55.9	55.9	55.9	56.9	55.9	56.0
≥ 12000		48.4	50.5	53.7	56.4	56.9	57.3	58.0	58.2	58.3	58.4	58.4	58.4	58.4	58.4	58.5
≥ 10000		51.1	53.6	56.9	59.8	60.4	60.8	61.6	61.8	61.9	61.9	61.9	61.9	61.9	62.0	62.0
≥ 9000		52.6	55.1	58.5	61.5	62.1	62.5	63.3	63.5	63.6	63.6	63.6	63.6	63.7	63.7	63.7
IV 8000		53.5	56.1	59.7	62.7	63.3	63.7	64.5	64.7	64.9	64.9	64.9	64.9	64.9	64.9	65.0
IV 7000		55.2	57.9	61.6	64.8	65.5	65.9	66.7	66.9	67.0	67.1	67.1	67.1	67.1	67.1	67.2
IV 6000		58.0	60.8	64.7	68.0	68.7	69.1	70.0	70.2	70.3	70.4	70.4	70.4	70.4	70.4	70.5
IV 5000		60.8	63.7	67.8	71.3	72.1	72.6	73.5	73.7	73.9	73.9	73.9	73.9	74.0	74.0	74.0
IV 4500		63.3	66.2	70.4	74.0	74.8	75.3	76.2	76.4	76.6	76.6	76.6	76.6	76.7	76.7	76.7
IV 4000		67.0	70.1	74.5	78.2	79.0	79.6	80.6	80.8	81.0	81.0	81.0	81.0	81.1	81.1	81.1
IV 3500		69.2	72.5	77.0	81.0	81.8	82.4	83.4	83.6	83.8	83.9	83.9	83.9	83.9	84.0	84.0
IV 3000		72.3	75.8	80.7	84.8	85.7	86.3	87.4	87.7	87.9	88.0	88.0	88.0	88.0	88.0	88.1
IV 2500		75.1	78.7	83.9	88.2	89.1	89.7	90.8	91.0	91.3	91.3	91.3	91.3	91.4	91.4	91.5
IV 2000		77.2	81.0	86.5	91.1	92.1	92.8	94.0	94.2	94.5	94.6	94.6	94.6	94.6	94.6	94.7
IV 1800		77.7	81.5	87.2	91.8	92.9	93.5	94.7	95.0	95.3	95.3	95.3	95.4	95.4	95.4	95.5
IV 1500		78.5	82.4	88.1	93.1	94.2	95.0	96.2	96.5	96.8	96.9	96.9	96.9	96.9	96.9	97.0
IV 1200		78.6	82.6	88.5	93.6	94.8	95.5	96.8	97.2	97.5	97.6	97.6	97.6	97.6	97.6	97.7
IV 1000		78.7	82.7	88.6	93.9	95.2	95.9	97.3	97.6	97.9	98.0	98.0	98.0	98.1	98.1	98.2
IV 900		78.7	82.8	88.6	94.0	95.3	96.1	97.4	97.8	98.1	98.2	98.2	98.2	98.2	98.3	98.3
IV 800		78.7	82.8	88.7	94.2	95.5	96.3	97.7	98.1	98.4	98.5	98.5	98.5	98.5	98.6	98.6
IV 700		78.7	82.8	88.7	94.3	95.6	96.4	97.9	98.2	98.6	98.6	98.7	98.7	98.7	98.7	98.8
IV 600		78.8	82.8	88.7	94.4	95.8	96.7	98.1	98.5	98.9	99.0	99.0	99.0	99.0	99.1	99.1
IV 500		78.8	82.8	88.8	94.4	95.8	96.7	98.3	98.7	99.1	99.2	99.3	99.3	99.3	99.3	99.4
IV 400		78.8	82.8	88.8	94.4	95.8	96.7	98.4	98.8	99.2	99.3	99.4	99.4	99.4	99.5	99.6
IV 300		78.8	82.8	88.8	94.4	95.8	96.8	98.5	98.9	99.4	99.5	99.6	99.6	99.6	99.7	99.8
IV 200		78.8	82.8	88.8	94.4	95.8	96.8	98.5	99.0	99.5	99.6	99.7	99.7	99.7	99.8	99.9
IV 100		78.8	82.8	88.8	94.4	95.8	96.8	98.5	99.0	99.5	99.6	99.7	99.7	99.8	99.8	99.9
IV 0		78.8	82.8	88.8	94.4	95.8	96.8	98.6	99.0	99.5	99.6	99.7	99.7	99.8	99.8	100.0

TOTAL NUMBER OF OBSERVATIONS 6673

2

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032

RHEIN-MAIN APT GERMANY/FRANKFURT

67-70

MAY

MAY

41

HOURS (EST)

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY STATUTE MILES															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ 1/32	≥ 0
NO CEILING		33.8	35.3	37.3	38.9	39.3	39.6	39.9	40.0	40.0	40.1	40.1	40.1	40.1	40.1	40.1
≥ 20000		44.0	46.0	48.6	50.7	51.1	51.4	51.8	51.9	51.9	51.9	51.9	51.9	52.0	52.0	52.0
≥ 18000		44.2	46.2	48.8	50.8	51.3	51.6	52.0	52.0	52.1	52.1	52.1	52.1	52.1	52.1	52.2
≥ 16000		44.2	46.2	48.8	50.8	51.3	51.6	52.0	52.1	52.1	52.1	52.1	52.1	52.1	52.1	52.2
≥ 14000		45.6	47.6	50.3	52.4	52.8	53.1	53.5	53.6	53.7	53.7	53.7	53.7	53.7	53.7	53.8
≥ 12000		49.1	51.4	54.3	56.5	57.0	57.3	57.7	57.8	57.8	57.8	57.8	57.8	57.8	57.9	57.9
≥ 10000		52.6	55.1	58.3	61.0	61.6	61.9	62.4	62.5	62.5	62.6	62.6	62.6	62.6	62.6	62.6
≥ 9000		54.6	57.4	60.8	63.6	64.2	64.5	65.0	65.1	65.2	65.2	65.2	65.2	65.2	65.2	65.3
≥ 8000		55.6	58.5	62.0	64.9	65.5	65.9	66.5	66.6	66.6	66.7	66.7	66.7	66.7	66.7	66.7
≥ 7000		58.0	61.2	64.9	67.8	68.5	69.0	69.5	69.6	69.7	69.7	69.7	69.7	69.8	69.8	69.8
≥ 6000		61.4	64.8	68.9	72.1	72.9	73.4	73.9	74.0	74.1	74.1	74.1	74.1	74.2	74.2	74.2
≥ 5000		64.8	68.5	72.8	76.3	77.1	77.7	78.4	78.5	78.5	78.6	78.6	78.6	78.6	78.6	78.6
≥ 4500		66.9	70.7	75.3	78.8	79.7	80.3	81.0	81.1	81.2	81.2	81.2	81.2	81.2	81.2	81.3
≥ 4000		70.0	74.0	78.9	82.8	83.6	84.3	85.0	85.2	85.3	85.3	85.3	85.3	85.3	85.3	85.4
≥ 3500		72.0	76.1	81.1	85.1	86.0	86.4	87.4	87.5	87.6	87.7	87.7	87.7	87.7	87.7	87.8
≥ 3000		74.6	78.9	84.2	88.4	89.4	90.2	91.0	91.2	91.3	91.3	91.4	91.4	91.4	91.4	91.4
≥ 2500		76.0	80.5	85.8	90.3	91.3	92.2	93.0	93.2	93.3	93.4	93.4	93.4	93.4	93.4	93.5
≥ 2000		77.1	81.7	87.2	91.7	92.8	93.6	94.6	94.7	94.8	94.9	94.9	94.9	94.9	94.9	95.0
≥ 1800		77.5	82.1	87.7	92.4	93.5	94.4	95.2	95.5	95.6	95.6	95.7	95.7	95.7	95.7	95.7
≥ 1500		78.1	82.7	88.5	93.3	94.5	95.4	96.4	96.6	96.7	96.7	96.8	96.8	96.8	96.8	96.8
≥ 1200		78.2	82.9	88.8	93.7	95.0	95.9	96.9	97.1	97.2	97.2	97.3	97.3	97.3	97.3	97.3
≥ 1000		78.2	82.9	88.8	93.8	95.2	96.1	97.2	97.4	97.5	97.6	97.6	97.6	97.6	97.6	97.7
≥ 900		78.2	82.9	88.9	93.9	95.3	96.2	97.3	97.6	97.7	97.7	97.7	97.7	97.7	97.7	97.8
≥ 800		78.3	83.0	88.9	94.0	95.4	96.4	97.6	97.8	97.9	97.9	98.0	98.0	98.0	98.0	98.0
≥ 700		78.3	83.0	89.0	94.1	95.5	96.5	97.7	97.9	98.0	98.1	98.1	98.1	98.1	98.1	98.2
≥ 600		78.3	83.0	89.0	94.2	95.7	96.7	97.9	98.2	98.3	98.3	98.4	98.4	98.4	98.4	98.4
≥ 500		78.3	83.0	89.0	94.3	95.8	96.8	98.2	98.4	98.6	98.7	98.7	98.7	98.7	98.7	98.8
≥ 400		78.3	83.0	89.0	94.3	95.9	97.0	98.4	98.7	98.8	98.9	99.0	99.0	99.0	99.0	99.0
≥ 300		78.3	83.0	89.0	94.4	96.0	97.1	98.7	99.0	99.2	99.3	99.4	99.4	99.4	99.4	99.5
≥ 200		78.3	83.0	89.0	94.4	96.0	97.2	98.7	99.1	99.3	99.5	99.5	99.6	99.6	99.6	99.7
≥ 100		78.3	83.0	89.0	94.4	96.0	97.2	98.7	99.1	99.3	99.5	99.6	99.7	99.8	99.8	99.9
≥ 0		78.3	83.0	89.0	94.4	96.0	97.2	98.7	99.1	99.3	99.5	99.6	99.7	99.8	99.8	100.0

TOTAL NUMBER OF OBSERVATIONS 6829

2

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT

57-76

JU

MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

ALL

HOURS

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥5/16	≥.4	≥0
NO CEILING		39.2	40.5	42.3	44.4	44.9	45.2	45.6	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.8
≥ 20000		48.2	49.8	52.0	54.4	54.9	55.4	55.8	55.9	55.9	55.9	55.9	55.9	55.9	55.9	56.0
≥ 18000		48.3	49.9	52.2	54.6	55.1	55.6	56.0	56.0	56.0	56.1	56.1	56.1	56.1	56.1	56.1
≥ 16000		48.4	50.0	52.3	54.7	55.2	55.7	56.1	56.1	56.1	56.2	56.2	56.2	56.2	56.2	56.2
≥ 14000		49.3	51.0	53.2	55.7	56.2	56.7	57.1	57.1	57.1	57.2	57.2	57.2	57.2	57.2	57.2
≥ 12000		52.3	54.2	56.6	59.2	59.8	60.3	60.7	60.8	60.8	60.8	60.8	60.8	60.8	60.8	60.9
≥ 10000		56.7	59.0	61.9	64.8	65.5	66.2	66.7	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.9
≥ 9000		58.4	60.9	64.0	67.1	67.8	68.4	69.0	69.1	69.1	69.1	69.1	69.1	69.1	69.1	69.2
≥ 8000		59.5	62.0	65.2	68.4	69.1	69.8	70.5	70.6	70.7	70.7	70.7	70.7	70.7	70.7	70.8
≥ 7000		61.8	64.4	67.7	71.0	71.8	72.6	73.4	73.5	73.5	73.5	73.5	73.5	73.5	73.5	73.6
≥ 6000		65.6	68.4	71.9	75.5	76.4	77.2	78.0	78.1	78.2	78.2	78.2	78.2	78.2	78.2	78.3
≥ 5000		69.9	72.8	76.5	80.3	81.2	82.2	83.0	83.2	83.2	83.3	83.3	83.3	83.3	83.3	83.4
≥ 4500		72.0	74.9	78.7	82.6	83.5	84.5	85.4	85.5	85.6	85.6	85.6	85.6	85.6	85.6	85.7
≥ 4000		74.9	78.0	81.9	86.0	87.0	88.1	89.0	89.2	89.2	89.2	89.2	89.2	89.3	89.3	89.4
≥ 3500		76.4	79.5	83.5	87.7	88.7	89.8	90.7	90.9	91.0	91.0	91.0	91.0	91.0	91.0	91.1
≥ 3000		78.2	81.5	85.8	90.1	91.2	92.3	93.4	93.5	93.6	93.6	93.6	93.6	93.7	93.7	93.7
≥ 2500		79.2	82.6	87.1	91.6	92.7	93.9	94.9	95.1	95.2	95.2	95.2	95.2	95.3	95.3	95.3
≥ 2000		80.1	83.6	88.1	92.8	94.0	95.2	96.2	96.4	96.5	96.5	96.5	96.5	96.5	96.5	96.6
≥ 1800		80.4	83.9	88.5	93.1	94.3	95.5	96.6	96.7	96.8	96.8	96.8	96.8	96.9	96.9	96.9
≥ 1500		81.0	84.6	89.3	94.2	95.4	96.6	97.7	97.9	97.9	98.0	98.0	98.0	98.0	98.0	98.1
≥ 1200		81.5	85.1	89.9	94.8	96.1	97.4	98.4	98.6	98.7	98.7	98.7	98.7	98.8	98.8	98.8
≥ 1000		81.6	85.2	90.0	95.0	96.4	97.7	98.8	99.0	99.1	99.1	99.1	99.1	99.1	99.1	99.2
≥ 900		81.6	85.2	90.1	95.1	96.4	97.7	98.8	99.1	99.1	99.2	99.2	99.2	99.2	99.2	99.3
≥ 800		81.6	85.2	90.1	95.2	96.5	97.8	98.9	99.2	99.2	99.3	99.3	99.3	99.3	99.3	99.4
≥ 700		81.6	85.2	90.1	95.2	96.6	97.9	99.0	99.3	99.3	99.4	99.4	99.4	99.4	99.4	99.5
≥ 600		81.6	85.2	90.1	95.2	96.6	97.9	99.1	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.5
≥ 500		81.6	85.2	90.1	95.2	96.7	98.0	99.2	99.4	99.5	99.6	99.6	99.6	99.6	99.6	99.7
≥ 400		81.6	85.2	90.1	95.3	96.7	98.3	99.3	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.8
≥ 300		81.6	85.2	90.1	95.3	96.8	98.1	99.3	99.6	99.8	99.9	99.9	99.9	99.9	99.9	100.0
≥ 200		81.6	85.2	90.1	95.3	96.8	98.1	99.4	99.6	99.8	99.9	99.9	99.9	99.9	99.9	100.0
≥ 100		81.6	85.2	90.1	95.3	96.8	98.1	99.4	99.6	99.8	99.9	99.9	99.9	99.9	99.9	100.0
≥ 0		81.6	85.2	90.1	95.3	96.8	98.1	99.4	99.6	99.8	99.9	99.9	99.9	99.9	99.9	100.0

TOTAL NUMBER OF OBSERVATIONS

6725

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032

RHEIN-MAIN APT GERMANY/FRANKFURT

67-76

JUL

STATION

STATION NAME

YEARS

MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

ALL
HOURS LST

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1	≥ 1	≥ ¾	≥ ¾	≥ ¾	≥ 5/16	≥ .	≥ 0
NO CEILING		42.0	44.0	47.0	49.5	50.4	50.8	51.3	51.4	51.4	51.5	51.5	51.5	51.6	51.6	51.6
≥ 20000		48.5	51.0	54.3	57.0	57.9	58.4	59.0	59.0	59.1	59.2	59.2	59.2	59.2	59.2	59.2
≥ 18000		48.6	51.0	54.3	57.1	58.0	58.5	59.0	59.1	59.1	59.2	59.2	59.2	59.3	59.3	59.3
≥ 16000		48.6	51.0	54.4	57.1	58.0	58.5	59.1	59.1	59.2	59.2	59.2	59.2	59.3	59.3	59.3
≥ 14000		49.4	51.8	55.2	58.0	58.9	59.4	60.0	60.0	60.1	60.2	60.2	60.2	60.2	60.2	60.2
≥ 12000		51.6	54.2	57.8	60.9	61.8	62.3	62.9	63.0	63.0	63.1	63.1	63.1	63.1	63.1	63.1
≥ 10000		56.1	59.0	62.9	66.3	67.3	67.9	68.6	68.6	68.7	68.8	68.8	68.8	68.8	68.8	68.8
≥ 9000		58.0	61.0	65.1	68.6	69.7	70.3	71.0	71.1	71.1	71.2	71.2	71.2	71.3	71.3	71.3
≥ 8000		59.3	62.4	66.6	70.1	71.3	71.9	72.5	72.6	72.7	72.8	72.8	72.8	72.8	72.8	72.8
≥ 7000		62.0	65.2	69.7	73.4	74.6	75.2	75.9	76.0	76.0	76.1	76.1	76.2	76.2	76.2	76.2
≥ 6000		66.3	69.7	74.4	78.3	79.5	80.2	80.9	81.0	81.1	81.1	81.2	81.2	81.2	81.2	81.2
≥ 5000		70.2	73.9	78.8	83.0	84.3	85.1	85.8	85.9	86.0	86.0	86.1	86.1	86.1	86.1	86.1
≥ 4500		72.1	75.8	80.0	85.1	86.5	87.2	88.0	88.1	88.2	88.3	88.3	88.3	88.3	88.3	88.3
≥ 4000		74.5	78.4	83.7	88.2	89.6	90.4	91.2	91.3	91.4	91.5	91.5	91.6	91.6	91.6	91.6
≥ 3500		75.5	79.5	84.9	89.5	90.9	91.7	92.6	92.7	92.8	92.9	92.9	92.9	92.9	93.0	93.0
≥ 3000		76.8	80.9	86.4	91.2	92.6	93.5	94.4	94.5	94.6	94.7	94.7	94.8	94.8	94.8	94.8
≥ 2500		77.9	82.0	87.6	92.5	94.0	94.9	95.9	96.0	96.1	96.2	96.2	96.3	96.3	96.3	96.3
≥ 2000		78.6	82.8	88.5	93.5	95.1	96.0	97.0	97.1	97.2	97.3	97.3	97.4	97.4	97.4	97.4
≥ 1800		78.8	83.0	88.7	93.8	95.4	96.3	97.3	97.4	97.5	97.6	97.6	97.7	97.7	97.7	97.7
≥ 1500		79.0	83.2	89.0	94.2	95.8	96.7	97.8	97.9	98.0	98.1	98.1	98.2	98.2	98.2	98.2
≥ 1200		79.1	83.3	89.1	94.4	96.1	97.1	98.2	98.4	98.5	98.6	98.6	98.7	98.7	98.7	98.7
≥ 1000		79.1	83.3	89.1	94.5	96.2	97.2	98.4	98.6	98.7	98.8	98.8	98.9	98.9	98.9	98.9
≥ 900		79.1	83.4	89.2	94.5	96.3	97.3	98.5	98.6	98.7	98.8	98.8	98.9	98.9	98.9	98.9
≥ 800		79.1	83.4	89.2	94.6	96.3	97.3	98.5	98.7	98.8	98.9	98.9	99.0	99.0	99.0	99.0
≥ 700		79.1	83.4	89.2	94.6	96.3	97.4	98.6	98.8	98.9	99.0	99.0	99.1	99.1	99.1	99.1
≥ 600		79.1	83.4	89.2	94.6	96.3	97.4	98.6	98.8	98.9	99.0	99.1	99.2	99.2	99.2	99.2
≥ 500		79.1	83.4	89.3	94.6	96.4	97.5	98.9	99.0	99.2	99.3	99.3	99.3	99.3	99.4	99.4
≥ 400		79.1	83.4	89.3	94.6	96.4	97.6	99.0	99.2	99.3	99.4	99.4	99.5	99.5	99.5	99.5
≥ 300		79.1	83.4	89.3	94.6	96.4	97.6	99.1	99.3	99.4	99.6	99.6	99.7	99.7	99.7	99.7
≥ 200		79.1	83.4	89.3	94.6	96.4	97.6	99.1	99.3	99.5	99.6	99.7	99.7	99.7	99.8	99.8
≥ 100		79.1	83.4	89.3	94.6	96.4	97.6	99.1	99.3	99.5	99.6	99.7	99.7	99.8	99.8	99.9
≥ 0		79.1	83.4	89.3	94.6	96.4	97.6	99.1	99.3	99.5	99.6	99.7	99.7	99.8	99.8	100.0

TOTAL NUMBER OF OBSERVATIONS

6578

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

AU
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

ALL
HOURS

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥5/16	≥.1	≥0
NO CEILING		40.0	42.2	45.4	48.3	48.8	49.4	50.0	50.1	50.1	50.1	50.1	50.1	50.1	50.2	50.2
≥ 20000		47.9	50.6	54.2	57.7	58.3	59.1	59.7	59.9	59.9	59.9	59.9	59.9	59.9	60.0	60.0
IV 18000		48.1	50.8	54.4	57.8	58.4	59.2	59.9	60.0	60.1	60.1	60.1	60.1	60.1	60.1	60.2
IV 16000		48.1	50.8	54.4	57.8	58.5	59.2	59.9	60.1	60.1	60.1	60.1	60.1	60.2	60.2	60.2
IV 14000		49.3	52.2	55.9	59.3	60.0	60.8	61.5	61.6	61.7	61.7	61.7	61.7	61.7	61.7	61.8
IV 12000		52.9	56.2	60.3	64.1	64.8	65.6	66.5	66.7	66.7	66.7	66.7	66.7	66.8	66.8	66.8
IV 10000		56.8	60.4	65.1	69.5	70.4	71.4	72.5	72.6	72.7	72.7	72.7	72.7	72.8	72.8	72.9
IV 9000		57.9	61.9	66.7	71.3	72.2	73.2	74.4	74.6	74.7	74.7	74.7	74.7	74.7	74.7	74.8
IV 8000		58.5	62.6	67.5	72.3	73.3	74.3	75.5	75.7	75.8	75.8	75.8	75.8	75.9	75.9	75.9
IV 7000		60.4	64.7	69.8	74.7	75.8	76.8	78.0	78.3	78.3	78.3	78.3	78.3	78.4	78.4	78.4
IV 6000		62.9	67.3	72.7	77.7	78.9	79.9	81.2	81.5	81.5	81.5	81.5	81.5	81.6	81.6	81.6
IV 5000		65.5	70.3	75.9	81.1	82.3	83.4	84.7	85.0	85.1	85.1	85.1	85.1	85.1	85.2	85.2
IV 4500		66.8	71.7	77.5	82.7	83.9	85.0	86.4	86.6	86.7	86.7	86.7	86.8	86.8	86.8	86.8
IV 4000		68.5	73.5	79.6	85.0	86.3	87.4	88.9	89.1	89.3	89.3	89.3	89.3	89.3	89.3	89.4
IV 3500		69.4	74.5	80.6	86.2	87.5	88.7	90.2	90.4	90.6	90.6	90.6	90.6	90.6	90.6	90.7
IV 3000		70.6	75.8	82.1	87.9	89.3	90.6	92.1	92.4	92.6	92.6	92.6	92.6	92.6	92.6	92.7
IV 2500		71.6	76.9	83.5	89.5	91.1	92.3	94.0	94.3	94.4	94.4	94.4	94.5	94.5	94.5	94.5
IV 2000		72.4	77.9	84.5	90.7	92.4	93.7	95.4	95.7	95.9	95.9	95.9	95.9	95.9	95.9	96.0
IV 1800		72.7	78.2	84.9	91.0	92.7	94.0	95.8	96.1	96.2	96.2	96.2	96.2	96.3	96.3	96.3
IV 1600		73.0	78.6	85.5	91.8	93.6	94.9	96.8	97.1	97.3	97.3	97.3	97.3	97.3	97.4	97.4
IV 1200		73.2	78.8	85.8	92.2	93.9	95.3	97.2	97.7	97.8	97.8	97.8	97.8	97.9	97.9	97.9
IV 1000		73.3	78.9	86.0	92.4	94.2	95.6	97.6	98.1	98.3	98.3	98.3	98.3	98.3	98.3	98.4
IV 900		73.3	78.9	86.0	92.4	94.2	95.6	97.7	98.1	98.3	98.3	98.3	98.3	98.4	98.4	98.4
IV 800		73.3	78.9	86.0	92.5	94.3	95.7	97.8	98.3	98.5	98.5	98.5	98.5	98.6	98.6	98.6
IV 700		73.3	79.0	86.0	92.5	94.4	95.8	98.0	98.5	98.7	98.7	98.7	98.7	98.7	98.7	98.8
IV 600		73.3	79.0	86.1	92.6	94.5	95.9	98.1	98.6	98.8	98.8	98.8	98.8	98.9	98.9	98.9
IV 500		73.3	79.0	86.1	92.6	94.5	96.0	98.2	98.7	98.9	99.0	99.0	99.0	99.0	99.0	99.1
IV 400		73.3	79.0	86.1	92.7	94.6	96.1	98.4	98.9	99.2	99.2	99.2	99.2	99.2	99.3	99.3
IV 300		73.3	79.0	86.1	92.7	94.7	96.2	98.6	99.2	99.5	99.5	99.5	99.6	99.6	99.6	99.7
IV 200		73.3	79.0	86.1	92.7	94.7	96.2	98.6	99.2	99.5	99.6	99.6	99.7	99.7	99.7	99.8
IV 100		73.3	79.0	86.1	92.7	94.7	96.2	98.6	99.2	99.5	99.6	99.6	99.7	99.7	99.7	99.8
IV 0		73.3	79.0	86.1	92.7	94.7	96.2	98.6	99.2	99.5	99.6	99.6	99.7	99.8	99.8	100.0

TOTAL NUMBER OF OBSERVATIONS 6794

2

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032

RHEIN-MAIN APT GERMANY/FRANKFURT

07-76

35

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

ALL
HOURS

CEILING (FEET)	VISIBILITY STATUTE MILES															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2.5	≥ 2	≥ 1.5	≥ 1.4	≥ 1	≥ .5	≥ .5	≥ .5	≥ .5	≥ .5	≥ .5
NO CEILING		30.1	32.6	36.5	41.0	42.2	43.7	45.4	45.9	46.2	46.3	46.4	46.4	46.5	46.5	46.7
≥ 20000		35.9	38.9	43.4	48.7	50.0	51.9	53.9	54.6	54.8	55.0	55.1	55.1	55.2	55.3	55.4
≥ 18000		35.9	38.9	43.5	48.8	50.1	52.0	54.0	54.7	54.9	55.1	55.1	55.2	55.3	55.3	55.5
≥ 16000		35.9	38.9	43.5	48.8	50.1	52.0	54.0	54.7	54.9	55.1	55.1	55.2	55.3	55.3	55.5
≥ 14000		36.3	39.4	44.1	49.4	50.7	52.6	54.7	55.3	55.6	55.7	55.8	55.9	55.9	56.0	56.2
≥ 12000		38.1	41.4	46.5	52.1	53.6	55.5	57.7	58.4	58.7	58.8	58.9	58.9	59.0	59.1	59.2
≥ 10000		41.6	45.2	51.0	57.3	58.9	60.9	63.3	64.0	64.3	64.4	64.5	64.6	64.7	64.7	64.9
≥ 9000		43.5	47.2	53.2	59.7	61.4	63.6	66.0	66.8	67.1	67.2	67.3	67.3	67.4	67.5	67.7
≥ 8000		45.1	49.0	55.0	61.8	63.6	65.8	68.3	69.1	69.4	69.5	69.6	69.6	69.7	69.8	70.0
≥ 7000		47.3	51.3	57.5	64.3	66.2	68.5	71.0	71.8	72.1	72.3	72.4	72.4	72.5	72.6	72.8
≥ 6000		50.5	54.5	61.0	68.1	70.1	72.5	75.1	75.9	76.2	76.4	76.4	76.5	76.6	76.7	76.8
≥ 5000		53.1	57.4	64.3	71.9	74.1	76.6	79.3	80.2	80.5	80.7	80.8	80.8	80.9	81.0	81.2
≥ 4500		54.5	59.0	66.1	73.8	76.0	78.5	81.2	82.2	82.6	82.7	82.8	82.9	83.0	83.0	83.2
≥ 4000		56.8	61.4	68.8	76.9	79.3	81.7	84.4	85.5	86.0	86.1	86.2	86.2	86.3	86.4	86.6
≥ 3500		58.0	62.7	70.2	78.5	80.9	83.6	86.3	87.2	87.7	87.8	87.9	87.9	88.0	88.1	88.3
≥ 3000		59.6	64.4	72.0	80.6	83.1	85.6	88.7	89.6	90.1	90.2	90.3	90.3	90.4	90.5	90.7
≥ 2500		60.8	65.8	73.7	82.4	84.9	87.5	90.7	91.7	92.2	92.3	92.4	92.5	92.6	92.6	92.8
≥ 2000		61.9	67.0	74.9	83.7	86.4	89.0	92.2	93.2	93.7	93.9	94.0	94.0	94.1	94.2	94.4
≥ 1800		62.1	67.2	75.2	84.1	86.7	89.4	92.6	93.6	94.1	94.3	94.4	94.4	94.5	94.6	94.8
≥ 1500		62.4	67.6	75.6	84.6	87.4	90.1	93.4	94.4	94.9	95.1	95.1	95.2	95.3	95.4	95.6
≥ 1200		62.5	67.7	75.9	85.0	87.8	90.6	94.0	95.1	95.6	95.7	95.8	95.8	96.0	96.0	96.2
≥ 1000		62.5	67.7	75.9	85.2	88.1	90.9	94.4	95.4	96.0	96.1	96.2	96.3	96.4	96.5	96.6
≥ 900		62.5	67.7	76.0	85.3	88.2	91.0	94.5	95.5	96.1	96.2	96.3	96.4	96.5	96.6	96.7
≥ 800		62.5	67.7	76.0	85.3	88.2	91.0	94.5	95.5	96.1	96.2	96.3	96.4	96.5	96.6	96.7
≥ 700		62.6	67.7	76.0	85.4	88.3	91.2	94.7	95.8	96.4	96.5	96.6	96.7	96.8	96.9	97.0
≥ 600		62.6	67.8	76.1	85.6	88.5	91.4	95.0	96.1	96.7	96.8	97.0	97.0	97.1	97.2	97.4
≥ 500		62.6	67.8	76.2	85.7	88.7	91.7	95.4	96.6	97.1	97.2	97.4	97.5	97.6	97.7	97.9
≥ 400		62.6	67.8	76.2	85.7	88.7	91.7	95.4	96.6	97.1	97.2	97.4	97.5	97.6	97.7	97.9
≥ 300		62.6	67.8	76.2	85.7	88.8	91.8	95.7	96.9	97.7	97.9	98.1	98.2	98.4	98.4	98.6
≥ 200		62.6	67.8	76.2	85.7	88.8	91.8	95.7	97.0	97.7	98.1	98.2	98.5	98.7	98.7	99.1
≥ 100		62.6	67.8	76.2	85.8	88.8	91.8	95.7	97.0	97.8	98.1	98.4	98.6	98.8	98.8	99.5
≥ 0		62.4	67.8	76.2	85.8	88.8	91.8	95.7	97.0	97.8	98.1	98.4	98.6	98.8	98.8	99.5

TOTAL NUMBER OF OBSERVATIONS

6666

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032

RHEIN-MAIN APT GERMANY/FRANKFURT

67-76

JCT

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

ALL

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ .	≥ 0
NO CEILING		17.7	19.3	22.1	25.4	26.6	27.9	30.2	31.2	31.8	32.1	32.2	32.3	32.5	32.6	33.1
≥ 20000		21.3	23.3	26.7	30.9	32.5	34.1	36.7	37.7	38.4	38.7	38.9	39.0	39.2	39.3	39.8
IV 18000		21.4	23.3	26.7	31.0	32.5	34.2	36.8	37.8	38.5	38.8	39.0	39.1	39.3	39.4	39.9
IV 16000		21.4	23.3	26.7	31.0	32.5	34.2	36.8	37.8	38.5	38.8	39.0	39.1	39.3	39.4	39.9
IV 14000		21.8	23.7	27.2	31.5	33.0	34.6	37.3	38.3	39.0	39.3	39.5	39.6	39.8	39.9	40.4
IV 12000		23.5	25.6	29.3	33.7	35.3	37.0	39.7	40.8	41.4	41.8	41.9	42.0	42.3	42.4	42.9
IV 10000		25.9	28.1	32.1	36.7	38.4	40.1	42.9	44.0	44.7	45.0	45.1	45.2	45.5	45.6	46.1
IV 9000		26.7	29.0	33.1	37.8	39.5	41.4	44.2	45.3	45.9	46.3	46.4	46.5	46.8	46.9	47.4
IV 8000		27.3	29.6	33.9	38.7	40.5	42.4	45.3	46.4	47.0	47.4	47.5	47.6	47.9	48.0	48.5
IV 7000		28.8	31.2	35.6	40.6	42.4	44.4	47.4	48.5	49.2	49.5	49.7	49.8	50.0	50.2	50.7
IV 6000		31.5	34.1	38.7	43.9	45.8	47.9	51.1	52.2	52.9	53.3	53.5	53.6	53.8	54.0	54.5
IV 5000		34.5	37.5	42.3	47.9	49.9	52.1	55.3	56.4	57.2	57.6	57.8	57.9	58.2	58.3	58.8
IV 4500		36.2	39.5	44.5	50.2	52.3	54.7	58.0	59.1	59.9	60.3	60.5	60.6	60.9	61.0	61.6
IV 4000		38.7	42.1	47.7	54.0	56.3	58.8	62.2	63.4	64.3	64.6	64.8	64.9	65.2	65.3	65.9
IV 3500		40.9	44.5	50.3	57.1	59.4	62.1	65.7	66.8	67.7	68.1	68.2	68.3	68.6	68.8	69.3
IV 3000		43.7	47.4	53.6	60.7	63.1	65.9	69.7	70.9	71.8	72.2	72.4	72.5	72.8	73.0	73.5
IV 2500		45.5	49.4	56.0	63.5	66.2	69.1	73.1	74.3	75.2	75.6	75.8	76.0	76.3	76.4	77.0
IV 2000		47.5	51.7	58.9	67.0	69.7	72.8	76.9	78.1	79.1	79.5	79.7	79.8	80.1	80.3	80.8
IV 1800		48.3	52.6	60.0	68.4	71.1	74.2	78.3	79.6	80.6	81.0	81.2	81.3	81.6	81.8	82.3
IV 1500		49.2	53.8	61.8	70.7	73.6	76.7	81.0	82.3	83.3	83.7	83.9	84.1	84.4	84.5	85.1
IV 1200		49.8	54.7	62.9	72.4	75.5	78.8	83.2	84.5	85.6	86.0	86.2	86.3	86.6	86.8	87.3
IV 1000		49.9	54.8	63.3	73.1	76.2	79.5	84.0	85.4	86.4	86.9	87.1	87.2	87.6	87.7	88.3
IV 900		49.9	54.9	63.4	73.3	76.5	79.8	84.4	85.7	86.8	87.2	87.4	87.6	87.9	88.1	88.6
IV 800		49.9	54.9	63.5	73.6	76.7	80.1	84.7	86.1	87.2	87.6	87.9	88.1	88.4	88.6	89.1
IV 700		50.0	55.0	63.6	73.8	77.0	80.4	85.1	86.5	87.6	88.1	88.3	88.5	88.8	89.0	89.5
IV 600		50.0	55.0	63.6	74.0	77.2	80.7	85.5	86.9	88.1	88.6	88.8	89.0	89.3	89.5	90.0
IV 500		50.0	55.0	63.7	74.1	77.4	81.0	86.0	87.5	88.8	89.4	89.7	89.9	90.2	90.4	90.9
IV 400		50.0	55.0	63.7	74.2	77.5	81.1	86.4	88.0	89.5	90.2	90.5	90.8	91.1	91.2	91.8
IV 300		50.0	55.0	63.7	74.2	77.6	81.4	87.0	89.0	90.7	91.7	92.2	92.6	93.0	93.2	93.7
IV 200		50.0	55.0	63.7	74.2	77.6	81.4	87.1	89.2	91.0	92.1	92.5	93.2	93.8	94.1	94.9
IV 100		50.0	55.0	63.7	74.2	77.6	81.4	87.1	89.2	91.1	92.1	92.5	93.2	93.8	94.6	96.6
IV 0		50.0	55.0	63.7	74.2	77.6	81.4	87.1	89.2	91.1	92.2	92.5	93.5	94.6	95.4	100.0

TOTAL NUMBER OF OBSERVATIONS

6834

2

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATIONRHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME57-76
YEAR40
MONTHPERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)ALL
HOURS U.S.

CEILING (FEET)	VISIBILITY - STATUTE MILES															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	¾	¾	¾	¾	¾	≥0
NO CEILING		14.0	15.5	17.5	20.0	20.9	21.5	22.9	23.3	23.7	23.8	23.9	23.9	24.0	24.0	24.3
≥ 20000		17.1	18.8	21.1	24.1	25.4	26.3	27.7	28.3	28.8	28.8	28.9	29.0	29.0	29.1	29.4
IV 18000		17.2	18.9	21.3	24.3	25.5	26.5	27.9	28.5	28.9	29.0	29.0	29.1	29.2	29.2	29.5
IV 16000		17.3	18.9	21.3	24.3	25.6	26.5	28.0	28.5	29.0	29.0	29.1	29.2	29.2	29.3	29.6
IV 14000		17.5	19.2	21.7	24.7	25.9	26.9	28.3	28.9	29.4	29.4	29.5	29.6	29.6	29.7	30.0
IV 12000		18.7	20.5	23.1	26.3	27.6	28.6	30.1	30.7	31.2	31.2	31.3	31.4	31.5	31.5	31.8
IV 10000		21.3	23.4	26.4	29.7	31.2	32.3	34.0	34.6	35.1	35.1	35.2	35.3	35.4	35.4	35.8
IV 9000		22.4	24.6	27.7	31.2	32.7	33.8	35.6	36.3	36.7	36.8	36.8	37.0	37.0	37.1	37.4
IV 8000		23.1	25.3	28.6	32.1	33.7	34.8	36.6	37.3	37.8	37.8	37.9	38.0	38.1	38.1	38.4
IV 7000		24.0	26.4	29.7	33.3	35.0	36.1	38.7	38.7	39.1	39.2	39.2	39.3	39.4	39.5	39.8
IV 6000		25.6	28.0	31.5	35.5	37.2	38.3	40.3	41.0	41.5	41.5	41.6	41.7	41.8	41.8	42.2
IV 5000		28.1	30.6	34.5	38.9	40.6	41.9	44.0	44.8	45.3	45.3	45.4	45.5	45.6	45.6	46.0
IV 4500		30.2	32.9	36.7	41.5	43.3	44.6	46.8	47.6	48.1	48.2	48.2	48.3	48.4	48.5	48.8
IV 4000		33.0	36.0	40.1	45.4	47.4	46.9	51.2	52.0	52.6	52.6	52.7	52.8	52.9	52.9	53.3
IV 3500		35.8	39.0	43.4	49.0	51.2	52.8	55.4	56.2	56.7	56.8	56.9	57.0	57.1	57.1	57.4
IV 3000		38.9	42.4	47.3	53.5	55.8	57.6	60.5	61.3	61.9	62.0	62.1	62.2	62.3	62.3	62.6
IV 2500		41.3	45.3	50.6	57.6	60.1	62.1	65.4	66.3	66.9	67.0	67.1	67.2	67.3	67.3	67.7
IV 2000		44.3	48.4	54.1	61.8	64.5	66.8	70.4	71.4	72.0	72.1	72.2	72.3	72.4	72.4	72.8
IV 1800		45.3	49.6	55.6	63.5	66.2	68.6	72.4	73.4	74.0	74.1	74.2	74.3	74.4	74.5	74.8
IV 1500		46.8	51.3	57.9	66.3	69.1	71.7	75.7	76.8	77.5	77.6	77.8	77.9	78.0	78.0	78.3
IV 1200		47.7	52.5	59.6	69.1	72.2	75.0	79.4	80.9	81.2	81.3	81.5	81.6	81.7	81.7	82.1
IV 1000		47.9	52.8	60.2	70.2	73.4	76.5	81.2	82.4	83.1	83.3	83.4	83.5	83.5	83.7	84.0
IV 900		47.9	52.9	60.3	70.5	73.8	77.0	81.8	83.0	83.7	83.9	84.0	84.1	84.2	84.3	84.6
IV 800		48.0	53.0	60.7	71.1	74.5	77.8	83.0	84.3	85.0	85.1	85.2	85.4	85.5	85.6	85.9
IV 700		48.0	53.1	60.8	71.4	74.8	78.3	83.7	85.0	85.8	85.9	86.0	86.2	86.3	86.3	86.6
IV 600		48.1	53.2	61.0	71.7	75.2	78.8	84.5	85.9	86.7	86.9	87.0	87.2	87.3	87.3	87.6
IV 500		48.1	53.2	61.1	72.0	75.6	79.6	85.8	87.2	88.1	88.3	88.4	88.5	88.6	88.7	89.0
IV 400		48.1	53.2	61.1	72.1	75.8	80.0	86.8	88.3	89.5	89.9	90.0	90.2	90.3	90.3	90.6
IV 300		48.1	53.3	61.2	72.2	76.0	80.3	87.7	89.7	91.2	91.9	92.2	92.4	92.5	92.5	93.0
IV 200		48.1	53.3	61.2	72.2	76.0	80.3	88.0	90.3	92.5	93.5	94.0	94.4	94.9	95.1	95.8
IV 100		48.1	53.3	61.2	72.2	76.0	80.3	88.0	90.3	92.7	93.7	94.3	94.9	95.8	96.1	97.9
IV 0		48.1	53.3	61.2	72.2	76.0	80.3	88.0	90.3	92.7	93.7	94.3	95.0	96.1	96.6	100.0

TOTAL NUMBER OF OBSERVATIONS 6783

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

57-76
YEAR

DEL
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

ALL
MONTHS

CEILING FEET	VISIBILITY STATUTE MILES															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2.5	≥ 2	≥ 1.5	≥ 1	≥ .5	≥ .3	≥ .1	≥ .05	≥ .02	≥ .01	≥ 0
NO CEILING		10.8	11.7	13.9	16.6	17.4	18.4	19.5	19.9	20.1	20.1	20.1	20.2	20.3	20.3	20.4
≥ 20000		12.7	13.8	16.5	19.7	20.7	21.9	23.1	23.5	23.7	23.8	23.9	23.9	24.0	24.1	24.1
≥ 18000		12.7	13.9	16.6	19.8	20.8	22.0	23.2	23.7	23.9	24.0	24.0	24.1	24.2	24.2	24.2
≥ 16000		12.7	13.9	16.6	19.8	20.8	22.0	23.2	23.7	23.9	24.0	24.0	24.1	24.2	24.2	24.2
≥ 14000		12.9	14.2	17.0	20.2	21.3	22.5	23.7	24.1	24.3	24.5	24.5	24.6	24.6	24.7	24.8
≥ 12000		13.5	14.7	17.8	21.2	22.4	23.6	25.0	25.4	25.6	25.7	25.7	25.8	25.9	25.9	26.0
IV 10000		14.5	15.9	19.2	23.1	24.4	25.7	27.1	27.5	27.8	27.9	27.9	28.0	28.1	28.1	28.2
IV 9000		15.2	16.6	20.0	24.0	25.4	26.7	28.2	28.3	28.8	29.0	29.0	29.1	29.2	29.2	29.3
IV 8000		15.7	17.1	20.5	24.8	26.1	27.5	29.0	29.4	29.7	29.8	29.8	29.9	30.0	30.0	30.1
IV 7000		16.3	17.8	21.4	25.8	27.2	28.6	30.1	30.6	30.8	31.0	31.0	31.1	31.2	31.2	31.3
IV 6000		17.5	19.2	23.0	27.6	29.1	30.6	32.2	32.6	32.9	33.0	33.1	33.2	33.2	33.3	33.4
IV 5000		19.7	21.7	25.7	30.9	32.7	34.4	36.1	36.6	36.9	37.0	37.1	37.1	37.2	37.2	37.3
IV 4500		21.8	23.9	28.2	33.9	35.8	37.6	39.5	39.9	40.2	40.3	40.4	40.5	40.6	40.6	40.7
IV 4000		24.4	27.0	31.5	37.9	39.9	41.9	44.1	44.6	45.0	45.1	45.2	45.2	45.3	45.4	45.4
IV 3500		26.7	29.6	34.5	41.5	43.9	46.2	48.7	49.3	49.7	49.9	50.0	50.0	50.1	50.2	50.2
IV 3000		29.1	32.4	37.8	45.5	48.3	50.8	53.2	54.6	55.1	55.3	55.4	55.5	55.5	55.6	55.6
IV 2500		31.4	35.1	41.4	49.7	52.9	55.6	58.8	59.7	60.3	60.4	60.4	60.6	60.7	60.7	60.8
IV 2000		34.1	38.3	45.2	54.4	57.9	61.0	64.6	65.7	66.3	66.5	66.6	66.6	66.7	66.7	66.8
IV 1800		35.4	39.8	47.2	56.8	60.4	63.5	67.4	68.5	69.0	69.3	69.3	69.4	69.5	69.5	69.6
IV 1500		37.2	42.0	50.2	60.6	64.6	68.0	72.4	73.7	74.4	74.6	74.7	74.7	74.8	74.9	74.9
IV 1200		38.4	43.7	52.8	64.3	68.6	72.3	77.2	78.6	79.3	79.6	79.6	79.7	79.8	79.8	79.9
IV 1000		38.8	44.2	54.0	66.3	70.8	74.8	80.3	81.7	82.5	82.8	82.9	82.9	83.0	83.1	83.2
IV 900		38.9	44.3	54.2	66.9	71.3	75.6	81.2	82.7	83.5	83.8	83.9	84.0	84.1	84.1	84.2
IV 800		39.0	44.4	54.6	67.8	72.5	77.1	83.0	84.7	85.6	85.9	86.0	86.1	86.2	86.2	86.3
IV 700		39.0	44.5	55.1	68.7	73.7	78.6	84.9	86.6	87.6	87.9	88.0	88.1	88.2	88.3	88.3
IV 600		39.1	44.6	55.4	69.7	74.8	79.9	86.6	88.6	89.7	90.0	90.0	90.3	90.4	90.4	90.5
IV 500		39.1	44.6	55.6	70.4	75.7	81.0	88.4	90.5	91.8	92.1	92.3	92.4	92.6	92.6	92.7
IV 400		39.1	44.6	55.7	70.5	75.9	81.4	89.3	91.7	93.3	93.6	94.1	94.2	94.4	94.4	94.5
IV 300		39.1	44.6	55.7	70.6	76.0	81.7	89.9	92.6	94.7	95.3	95.7	95.9	96.2	96.2	96.3
IV 200		39.1	44.6	55.7	70.6	76.1	81.7	90.1	92.9	95.4	96.2	96.7	96.9	97.4	97.5	97.6
IV 100		39.1	44.6	55.7	70.6	76.1	81.7	90.1	92.9	95.4	96.3	96.9	97.2	98.0	98.3	99.0
IV 0		39.1	44.6	55.7	70.6	76.1	81.7	90.1	92.9	95.4	96.4	97.0	97.5	98.6	99.0	100.0

TOTAL NUMBER OF OBSERVATIONS

7082

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

57-70
YEARS

J.A.
OFFICER

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0000-2000
HOURS

CEILING (FEET)	VISIBILITY STATUTE MILES															
	≥10	≥6	≥5	≥4	≥3	≥2.5	≥2	≥1.5	≥1	≥0.5	≥0.25	≥0.1	≥0.05	≥0.025	≥0.01	≥0
NO CEILING		12.6	14.0	15.9	19.4	20.0	20.7	22.7	22.8	23.3	23.3	23.4	23.0	23.7	23.7	23.9
≥ 20000		13.6	15.1	17.2	21.0	21.6	22.3	24.9	24.9	25.3	25.3	25.7	25.7	25.8	25.0	25.9
≥ 18000		13.7	15.2	17.4	21.1	21.7	22.4	24.9	25.0	25.5	25.5	25.6	25.8	25.9	25.9	26.0
≥ 16000		13.7	15.2	17.4	21.1	21.7	22.4	24.9	25.0	25.5	25.5	25.6	25.8	25.9	25.9	26.0
≥ 14000		13.9	15.4	17.6	21.5	22.0	22.7	25.3	25.5	25.9	25.9	25.9	26.3	26.4	26.4	26.5
≥ 12000		14.4	15.9	18.0	22.0	22.9	23.7	26.5	26.6	27.1	27.1	27.4	27.4	27.5	27.5	27.6
≥ 10000		16.6	18.5	20.8	25.1	26.0	26.8	30.0	30.3	30.7	30.7	31.1	31.1	31.2	31.2	31.3
≥ 9000		17.0	19.1	21.6	25.9	26.8	27.6	30.9	31.2	31.6	31.6	32.0	32.0	32.1	32.1	32.2
≥ 8000		17.6	19.6	22.1	26.8	27.7	28.7	32.0	32.2	32.6	32.6	33.0	33.0	33.1	33.1	33.2
≥ 7000		18.7	20.8	23.5	28.4	29.3	30.3	33.7	33.9	34.4	34.4	34.7	34.7	34.8	34.8	34.9
≥ 6000		20.8	22.0	25.8	30.7	31.8	32.9	36.6	37.0	37.7	37.7	38.0	38.0	38.1	38.1	38.2
≥ 5000		22.1	24.3	27.3	33.6	35.2	36.6	40.8	41.1	41.8	41.8	42.1	42.1	42.2	42.2	42.4
≥ 4500		24.0	26.1	29.2	35.7	37.3	39.0	43.6	43.9	44.6	44.6	45.0	45.0	45.1	45.1	45.2
≥ 4000		26.4	29.0	32.4	39.5	41.3	43.2	47.8	48.3	49.0	49.0	49.3	49.3	49.4	49.4	49.5
≥ 3500		28.1	30.8	34.6	42.2	44.1	46.0	50.9	51.4	52.1	52.1	52.4	52.4	52.5	52.5	52.6
≥ 3000		30.3	33.1	37.2	45.7	47.8	50.0	55.1	55.7	56.4	56.4	57.0	57.0	57.1	57.1	57.2
≥ 2500		33.2	36.4	41.3	51.0	53.4	55.6	60.7	61.3	62.0	62.0	62.6	62.6	62.7	62.7	62.8
≥ 2000		33.2	41.8	47.5	58.0	61.0	63.2	68.6	69.2	69.9	69.9	70.4	70.4	70.5	70.5	70.7
≥ 1800		40.2	43.8	49.9	60.7	63.8	66.1	71.6	72.1	72.8	72.8	73.4	73.4	73.5	73.5	73.6
≥ 1500		41.8	45.9	52.6	64.6	68.4	71.2	77.7	78.3	79.0	79.0	79.4	79.6	79.7	79.7	79.8
≥ 1200		42.9	47.5	54.6	67.4	71.3	74.3	81.4	82.1	82.8	82.8	83.3	83.4	83.6	83.6	83.7
≥ 1000		43.7	48.4	55.8	68.9	73.1	76.1	83.3	84.0	84.7	84.7	85.2	85.4	85.5	85.5	85.6
≥ 900		43.7	48.5	56.3	69.4	73.5	76.6	83.8	84.5	85.2	85.2	85.7	85.8	86.0	86.0	86.1
≥ 800		43.7	48.6	56.5	70.0	74.2	77.3	84.7	85.4	86.1	86.2	86.5	86.9	87.0	87.0	87.1
≥ 700		43.7	48.9	57.1	71.0	75.2	78.3	85.8	86.9	87.7	87.8	88.4	88.5	88.6	88.6	88.7
≥ 600		43.7	48.9	57.2	71.5	75.8	79.1	87.0	88.1	88.9	89.0	89.6	89.7	89.8	89.8	90.0
≥ 500		43.7	48.9	57.2	71.6	76.3	79.9	88.2	89.6	90.8	91.0	91.7	91.8	91.9	91.9	92.0
≥ 400		43.7	48.9	57.3	71.7	76.5	80.4	89.3	91.0	92.2	92.5	93.2	93.4	93.6	93.7	93.8
≥ 300		43.7	48.9	57.3	72.0	76.9	81.2	90.5	92.6	94.2	94.5	95.2	95.5	95.8	95.9	96.0
≥ 200		43.8	49.0	57.4	72.1	77.1	81.4	90.9	93.2	95.1	95.7	96.5	96.8	97.1	97.3	97.5
≥ 100		43.8	49.0	57.4	72.1	77.1	81.4	90.9	93.2	95.1	95.7	96.5	97.4	97.7	97.8	98.3
≥ 0		43.8	49.0	57.4	72.1	77.1	81.4	90.9	93.2	95.1	95.7	96.5	97.4	97.8	97.9	100.0

TOTAL NUMBER OF OBSERVATIONS

876

2

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032

RHEIN-MAIN APT GERMANY/FRANKFURT

67-76

JA

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0300-0500

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2.5	≥2	≥1.5	≥1	≥0.5	≥0.25	≥0.15	≥0.1	≥0.05	≥0.025	≥0.01
NO CEILING		8.7	9.4	10.4	12.6	14.1	14.7	16.9	17.7	18.1	18.5	19.0	19.2	19.3	19.3	19.3
≥ 20000		9.6	10.5	12.0	14.5	15.8	16.4	18.9	19.7	20.0	20.5	20.9	21.1	21.2	21.2	21.2
IV 18000		9.7	10.6	12.1	14.6	15.9	16.5	19.0	19.8	20.1	20.6	21.0	21.2	21.4	21.4	21.4
IV 16000		9.7	10.6	12.1	14.6	15.9	16.5	19.0	19.8	20.1	20.6	21.0	21.2	21.4	21.4	21.4
IV 14000		9.7	10.6	12.2	14.7	16.0	16.8	19.1	19.9	20.2	20.7	21.1	21.4	21.5	21.5	21.5
IV 12000		10.6	11.6	13.3	15.9	17.5	18.2	20.8	21.7	22.0	22.5	22.9	23.2	23.3	23.3	23.3
IV 10000		12.2	13.4	15.4	18.2	19.8	20.5	23.4	24.3	24.6	25.1	25.5	25.8	25.9	25.9	25.9
IV 9000		13.2	14.7	16.7	19.7	21.4	22.1	25.2	26.1	26.6	27.0	27.5	27.7	27.8	27.8	27.8
IV 8000		13.9	15.4	17.6	20.6	22.3	23.2	26.2	27.1	27.7	28.1	28.4	28.8	28.9	28.9	28.9
IV 7500		14.7	16.2	18.5	21.6	23.4	24.4	27.6	28.5	29.2	29.7	30.1	30.3	30.4	30.4	30.4
IV 6000		15.8	17.2	19.7	22.6	24.6	25.8	29.0	29.9	30.7	31.2	31.6	31.9	32.0	32.0	32.0
IV 5000		17.7	19.2	22.0	26.0	27.9	29.0	32.5	33.8	34.8	35.3	35.7	35.9	36.0	36.0	36.0
IV 4500		19.1	20.6	23.4	27.8	30.1	31.3	35.0	36.0	37.1	37.5	38.0	38.2	38.3	38.3	38.3
IV 4000		22.0	23.7	26.7	31.5	33.8	35.1	39.0	40.2	41.2	41.7	42.1	42.4	42.5	42.5	42.5
IV 3500		24.1	26.6	30.1	35.4	37.7	39.2	43.2	44.4	45.4	45.9	46.4	46.7	46.8	46.8	46.8
IV 3000		27.6	30.6	34.6	40.3	43.1	44.7	48.7	49.9	51.1	51.5	52.2	52.5	52.7	52.7	52.7
IV 2500		31.0	34.4	39.3	46.1	49.3	51.4	55.4	56.6	57.9	58.3	59.0	59.3	59.4	59.4	59.4
IV 2000		34.5	38.2	44.1	51.2	54.7	57.2	61.6	62.8	64.1	64.5	65.2	65.5	65.6	65.6	65.6
IV 1800		35.9	39.8	46.0	53.6	57.2	59.9	64.5	65.8	67.0	67.5	68.1	68.5	68.6	68.6	68.7
IV 1500		39.3	43.7	50.8	58.8	62.9	66.4	71.3	72.8	74.1	74.6	75.3	75.6	75.7	75.7	75.8
IV 1200		40.1	44.5	52.2	61.1	65.6	69.3	74.8	76.3	77.6	78.1	78.8	79.1	79.2	79.2	79.3
IV 1000		40.8	45.2	53.4	63.1	67.7	71.4	77.4	79.1	80.6	81.0	81.7	82.0	82.1	82.1	82.3
IV 900		40.8	45.2	53.4	63.1	67.9	71.8	77.9	79.7	81.1	81.6	82.3	82.6	82.7	82.7	82.8
IV 800		40.8	45.2	53.4	63.6	68.6	72.5	79.2	81.0	82.5	82.9	83.6	84.0	84.1	84.1	84.2
IV 700		40.8	45.5	53.6	64.2	69.2	73.2	80.5	82.4	83.8	84.3	85.1	85.4	85.5	85.5	85.8
IV 600		40.8	45.5	54.5	65.2	70.3	74.5	82.0	84.3	85.8	86.4	87.2	87.6	87.7	87.7	87.9
IV 500		40.8	45.5	54.7	65.8	71.4	75.7	83.6	86.1	87.6	88.2	89.2	89.6	89.8	89.8	90.1
IV 400		40.8	45.5	54.8	66.0	72.0	76.3	84.5	87.5	89.0	89.7	90.6	91.1	91.3	91.3	91.5
IV 300		40.8	45.5	54.8	66.3	72.5	77.2	86.3	89.6	91.3	92.0	92.9	93.4	93.7	93.7	93.9
IV 200		40.8	45.8	55.0	66.6	73.0	77.6	87.2	90.6	93.0	94.0	95.1	95.7	95.9	95.9	96.4
IV 100		40.8	45.8	55.0	66.6	73.0	77.6	87.2	90.6	93.0	94.0	95.3	95.8	96.2	96.3	97.4
IV 0		40.8	45.8	55.0	66.6	73.0	77.6	87.2	90.6	93.0	94.0	95.3	95.9	96.5	96.8	100.0

TOTAL NUMBER OF OBSERVATIONS

885

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEAR

JA
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

0000-0800
HOURS L.T.

CEILING 'FEET'	VISIBILITY STATUTE MILES															
	≥10	≥6	≥5	≥4	≥3	≥2.5	≥2	≥1.5	≥1.25	≥1	≥.75	≥.5	≥.25	≥.16	≥.1	≥0
NO CEILING		5.3	6.1	6.7	9.3	10.5	11.0	14.1	14.5	15.1	15.4	16.1	16.2	16.2	16.3	16.3
≥ 20000		6.1	7.2	8.2	11.2	12.6	13.4	16.9	17.5	18.2	18.6	19.2	19.3	19.6	19.7	19.9
≥ 18000		6.1	7.2	8.2	11.2	12.6	13.4	16.9	17.5	18.2	18.6	19.2	19.3	19.6	19.7	19.9
≥ 16000		6.1	7.2	8.2	11.2	12.6	13.4	16.9	17.5	18.2	18.6	19.2	19.3	19.6	19.7	19.9
≥ 14000		6.3	7.5	8.7	11.7	13.0	13.8	17.4	18.1	18.9	19.2	19.9	20.0	20.4	20.5	20.7
≥ 12000		7.0	8.4	9.6	12.8	14.3	15.1	18.8	19.5	20.2	20.6	21.4	21.4	21.7	21.8	22.0
≥ 10000		7.9	9.6	11.1	14.0	16.4	17.3	21.0	21.9	22.7	23.1	23.7	23.8	24.2	24.3	24.5
≥ 9000		8.1	9.8	11.4	15.4	17.0	17.9	21.6	22.6	23.4	23.7	24.4	24.5	24.9	25.0	25.2
≥ 8000		8.2	10.0	11.6	15.6	17.2	18.1	21.8	22.8	23.6	24.0	24.7	25.0	25.3	25.4	25.6
≥ 7000		3.9	10.8	12.4	16.4	18.0	18.9	22.6	23.6	24.4	24.9	25.8	25.0	26.4	26.5	26.8
≥ 6000		10.0	12.0	13.7	18.0	19.6	20.5	24.2	25.3	26.1	26.5	27.4	27.7	28.1	28.2	28.5
≥ 5000		11.8	13.9	15.9	20.6	22.4	23.5	27.7	28.9	29.7	30.1	31.2	31.4	31.9	32.1	32.3
≥ 4500		13.9	16.2	18.2	23.6	25.5	26.8	31.0	32.4	33.2	33.6	34.6	34.9	35.4	35.5	35.8
≥ 4000		15.3	17.7	19.8	25.8	27.8	29.1	33.7	35.2	36.0	36.4	37.5	37.7	38.2	38.4	38.6
≥ 3500		17.2	19.9	22.6	28.8	30.8	32.3	37.0	38.5	39.3	39.7	40.7	40.9	41.5	41.6	41.8
≥ 3000		20.9	24.2	27.4	34.0	36.0	38.0	42.7	44.7	45.4	46.0	47.0	47.4	48.0	48.1	48.5
≥ 2500		24.1	27.3	30.7	38.0	40.4	42.7	47.8	49.7	50.5	51.1	52.1	52.5	53.2	53.3	53.7
≥ 2000		28.0	31.5	35.4	43.5	46.7	49.3	55.7	56.9	57.9	58.5	59.5	60.0	60.5	60.7	61.1
≥ 1800		29.8	34.0	38.6	47.4	50.7	54.0	60.6	62.5	63.6	64.1	65.1	65.6	66.3	66.4	66.7
≥ 1500		32.1	36.7	41.8	51.2	55.1	58.7	66.5	68.6	69.6	70.2	71.2	71.7	72.3	72.4	72.8
≥ 1200		33.5	38.7	44.7	54.4	58.4	62.2	71.0	73.5	74.6	75.1	76.2	76.6	77.3	77.4	77.7
≥ 1000		34.2	39.5	45.8	56.1	60.1	63.7	73.1	75.6	76.7	77.4	78.4	78.9	79.5	79.6	80.0
≥ 900		34.2	39.5	45.9	56.6	60.6	64.6	74.1	76.6	77.7	78.4	79.4	79.9	80.5	80.7	81.0
≥ 800		34.2	39.5	46.0	57.0	61.1	65.4	75.4	77.8	79.0	79.6	80.7	81.1	81.8	81.9	82.2
≥ 700		34.2	39.5	46.2	57.5	61.8	66.3	76.7	79.4	80.5	81.2	82.2	82.7	83.4	83.5	83.8
≥ 600		34.2	39.5	46.5	58.2	62.4	67.0	78.2	80.9	82.2	83.1	84.4	84.8	85.6	85.7	86.1
≥ 500		34.2	39.5	46.5	58.6	63.3	68.2	79.6	82.5	83.8	84.8	86.1	86.5	87.4	87.5	87.9
≥ 400		34.2	39.5	46.5	59.1	63.8	68.7	80.5	83.6	85.6	86.6	88.0	88.4	89.5	89.7	90.0
≥ 300		34.2	39.5	46.5	59.1	63.8	68.7	80.5	83.6	85.6	86.6	88.0	88.4	89.5	89.7	90.0
≥ 200		34.2	39.5	46.5	59.2	63.9	68.9	82.9	86.7	89.3	90.3	91.9	92.4	93.6	93.7	94.1
≥ 100		34.2	39.6	46.6	59.2	63.9	69.4	82.9	86.8	89.9	91.1	92.7	93.3	94.7	94.9	96.7
≥ 0		34.2	39.6	46.6	59.2	63.9	69.4	82.9	86.8	89.9	91.1	92.7	93.3	95.2	95.7	100.0

TOTAL NUMBER OF OBSERVATIONS 889

2

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/HAC

CEILING VERSUS VISIBILITY

35032

RHEIN-MAIN APT GERMANY/FRANKFURT

67-76

JA

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0900-1100

CEILING FEET	VISIBILITY STATUTE MILES															
	≥10	≥6	≥5	≥4	≥3	≥2.5	≥2	≥1.5	≥1.2	≥1	≥.8	≥.6	≥.5	≥.4	≥.3	≥.2
NO CEILING		6.4	7.0	7.5	10.0	10.9	12.3	13.7	14.2	14.8	15.6	16.1	16.1	16.5	16.5	16.6
≥ 20000		8.7	9.7	10.6	13.6	15.3	15.9	19.0	19.9	20.6	21.0	22.1	22.2	22.9	22.9	23.1
≥ 18000		8.9	9.9	10.8	14.0	15.6	17.2	19.3	20.2	21.0	21.9	22.4	22.5	23.2	23.2	23.4
≥ 16000		8.9	9.9	10.8	14.0	15.6	17.2	19.3	20.2	21.0	21.9	22.4	22.5	23.2	23.2	23.4
≥ 14000		9.3	10.4	11.4	14.5	16.2	17.7	19.9	20.8	21.5	22.4	23.2	23.1	23.8	23.8	24.0
≥ 12000		9.6	10.7	12.3	15.7	17.4	19.0	21.5	22.4	23.2	24.1	24.7	24.9	25.6	25.6	25.8
≥ 10000		10.2	11.4	13.8	17.5	19.3	21.0	23.5	24.4	25.2	25.3	26.0	27.1	27.8	27.8	28.0
≥ 9000		10.8	12.1	14.7	18.8	20.6	22.3	25.1	26.1	26.9	28.0	28.6	28.8	29.5	29.5	29.7
≥ 8000		11.8	13.1	15.7	20.1	22.0	23.7	26.5	27.5	28.2	29.4	29.9	30.1	30.8	30.8	31.0
≥ 7000		12.3	13.7	16.5	21.0	22.0	24.1	27.5	28.5	29.2	30.4	31.0	31.3	32.1	32.1	32.4
≥ 6000		13.1	14.8	17.9	22.8	25.1	26.9	29.7	30.9	31.7	32.8	33.5	33.7	34.7	34.7	34.9
≥ 5000		14.2	16.2	19.3	24.8	27.3	29.4	32.8	34.3	35.2	36.3	37.1	37.3	38.3	38.3	38.5
≥ 4500		14.6	17.2	20.6	26.3	29.0	31.3	34.8	36.3	37.2	38.3	39.1	39.4	40.4	40.4	40.6
≥ 4000		16.1	18.8	23.0	29.4	32.0	34.8	38.7	40.4	41.5	42.6	43.4	43.8	44.8	44.8	45.0
≥ 3500		17.7	20.9	25.7	32.9	35.7	38.6	42.7	44.6	46.2	47.3	48.1	48.4	49.4	49.4	49.7
≥ 3000		19.6	23.1	28.0	35.7	39.1	42.2	47.4	49.4	51.3	52.5	53.3	53.9	54.9	54.9	55.1
≥ 2500		22.5	26.3	31.9	40.7	44.5	48.0	54.1	56.3	58.5	59.6	60.5	61.0	62.1	62.1	62.3
≥ 2000		24.9	28.9	34.9	44.9	49.1	52.9	59.5	61.7	64.2	65.3	66.2	66.7	67.7	67.7	68.0
≥ 1800		25.9	29.9	35.9	46.2	50.4	54.5	61.4	63.7	66.2	67.3	68.2	68.9	69.9	69.9	70.1
≥ 1500		27.5	31.7	37.9	48.8	53.3	57.6	65.3	67.9	70.5	71.7	72.7	73.3	74.3	74.3	74.6
≥ 1200		28.8	33.6	40.4	52.3	57.0	61.5	69.8	72.8	75.6	76.7	77.7	78.3	79.4	79.4	79.6
≥ 1000		29.0	33.8	40.8	54.0	59.3	63.8	72.4	75.4	78.2	79.4	80.5	81.4	82.4	82.4	82.6
≥ 900		29.0	33.8	41.0	54.4	59.6	64.2	72.9	76.0	78.8	79.9	81.1	82.0	83.0	83.0	83.3
≥ 800		29.0	33.8	41.1	54.8	60.3	65.3	74.3	77.6	80.4	81.5	82.7	83.6	84.6	84.6	84.8
≥ 700		29.0	33.8	41.1	55.1	60.6	65.7	75.3	78.7	81.5	82.8	84.0	85.0	86.2	86.2	86.4
≥ 600		29.0	33.8	41.1	55.1	60.6	65.8	76.0	79.5	82.6	84.0	85.2	86.4	87.5	87.5	87.7
≥ 500		29.0	33.8	41.1	55.1	60.7	66.0	76.1	79.9	83.5	85.5	86.9	88.1	89.3	89.3	89.5
≥ 400		29.0	33.8	41.1	55.1	61.0	66.3	77.2	81.5	85.6	87.9	89.5	90.8	92.2	92.2	92.4
≥ 300		29.0	33.8	41.1	55.1	61.0	66.3	77.7	82.5	87.4	90.1	91.9	93.4	95.2	95.2	95.6
≥ 200		29.0	33.8	41.1	55.1	61.0	66.3	77.7	82.5	87.5	90.2	92.5	94.5	97.3	97.3	98.0
≥ 100		29.0	33.8	41.1	55.1	61.0	66.3	77.7	82.5	87.5	90.3	92.6	94.9	97.9	98.1	98.7
≥ 0		29.0	33.8	41.1	55.1	61.0	66.3	77.7	82.5	87.5	90.3	92.6	94.9	98.0	98.2	100.0

TOTAL NUMBER OF OBSERVATIONS

896

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 7-76

JA.

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1200-1400
HOURS

CEILING (FEET)	VISIBILITY STATUTE MILES:															
	≥10	≥8	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1	≥¾	≥½	≥¼	≥⅓	≥⅒	≥⅑	≥0
NO CEILING		7.6	9.2	10.1	12.5	13.1	13.8	14.0	15.6	16.2	16.2	16.5	16.5	16.5	16.5	16.5
≥ 20000		11.1	13.7	15.5	18.2	19.5	20.4	22.0	23.0	23.7	23.8	24.5	24.8	24.8	24.9	24.9
≥ 18000		11.1	13.7	15.5	18.2	19.6	20.5	22.1	23.1	23.8	23.9	24.6	24.7	24.9	24.9	24.9
≥ 16000		11.1	13.7	15.5	18.2	19.6	20.5	22.1	23.1	23.8	23.9	24.6	24.7	24.9	24.9	24.9
≥ 14000		11.3	14.2	16.0	18.9	20.3	21.2	22.8	23.8	24.5	24.6	25.3	25.4	25.6	25.6	25.6
≥ 12000		12.3	15.4	17.4	20.3	22.1	23.2	24.0	25.8	26.5	26.6	27.3	27.5	27.7	27.7	27.7
≥ 10000		13.1	16.4	18.7	22.2	23.9	25.0	26.6	27.6	28.5	28.7	29.3	29.0	29.8	29.8	29.8
≥ 9000		14.0	17.6	19.9	23.8	25.8	27.0	28.5	29.6	30.5	30.7	31.4	31.6	31.8	31.8	31.8
≥ 8000		14.6	18.1	20.6	24.6	26.7	28.0	29.6	30.8	31.5	31.7	32.4	32.6	32.8	32.8	32.8
≥ 7000		15.1	18.8	21.6	26.3	28.4	29.7	31.4	32.4	33.3	33.5	34.2	34.4	35.0	35.0	35.0
≥ 6000		15.7	19.7	22.9	28.2	30.5	31.9	33.7	34.9	35.8	36.0	36.7	36.9	37.5	37.5	37.5
≥ 5000		17.6	21.9	25.3	30.6	33.1	34.5	36.6	37.7	38.7	39.0	39.6	39.9	40.4	40.4	40.4
≥ 4500		18.6	22.9	26.5	31.9	34.5	36.1	38.3	39.6	40.7	40.9	41.6	41.9	42.5	42.5	42.5
≥ 4000		19.0	23.7	27.9	34.2	37.1	39.4	42.0	43.4	44.5	44.8	45.6	46.0	46.7	46.7	46.7
≥ 3500		20.5	25.3	29.8	36.6	39.5	42.0	45.0	46.3	47.6	47.9	48.6	49.0	49.7	49.7	49.7
≥ 3000		23.4	28.4	33.3	41.0	44.3	47.0	50.2	51.6	52.9	53.2	53.9	54.4	55.0	55.0	55.0
≥ 2500		26.3	32.0	37.7	46.4	50.6	53.7	58.1	59.9	61.3	61.6	62.3	62.7	63.4	63.4	63.4
≥ 2000		30.4	36.5	42.6	52.3	57.3	60.7	65.3	67.5	69.0	69.4	70.1	70.6	71.2	71.2	71.2
≥ 1800		31.5	38.2	45.0	54.8	59.8	63.3	68.0	70.1	71.8	72.3	72.9	73.4	74.1	74.1	74.1
≥ 1500		33.2	40.0	47.1	57.4	62.6	66.5	71.7	74.2	76.1	76.6	77.2	77.8	78.5	78.5	78.5
≥ 1200		35.2	42.9	50.8	61.5	66.9	70.0	76.6	79.3	81.2	81.7	82.4	83.1	83.8	83.8	83.8
≥ 1000		35.7	43.4	51.5	62.6	68.4	72.6	79.0	81.8	83.8	84.3	85.1	85.7	86.4	86.4	86.4
≥ 900		35.7	43.4	51.5	62.6	68.4	72.7	79.0	82.3	84.4	84.9	85.7	86.4	87.1	87.1	87.1
≥ 800		35.7	43.6	51.9	63.4	69.2	73.8	81.2	83.9	86.0	86.5	87.3	88.0	88.7	88.7	88.7
≥ 700		35.7	43.6	52.1	63.8	69.5	74.3	81.8	84.6	86.6	87.3	88.1	88.8	89.5	89.5	89.5
≥ 600		35.7	43.6	52.1	63.8	69.8	74.5	82.2	85.3	87.5	88.3	89.1	89.9	90.6	90.6	90.6
≥ 500		35.8	43.7	52.2	64.0	70.2	75.1	83.2	86.6	89.1	89.9	90.7	91.7	92.4	92.4	92.4
≥ 400		35.8	43.7	52.2	64.0	70.3	75.2	83.3	87.9	91.1	92.4	93.2	94.3	95.1	95.1	95.1
≥ 300		35.8	43.7	52.2	64.0	70.3	75.2	83.3	88.6	91.8	93.7	95.0	96.5	97.6	97.7	97.7
≥ 200		35.8	43.7	52.2	64.0	70.3	75.2	83.3	88.6	92.0	93.8	95.4	97.2	98.6	98.8	99.0
≥ 100		35.8	43.7	52.2	64.0	70.3	75.2	83.3	88.6	92.0	93.8	95.4	97.3	98.9	99.0	99.2
≥ 0		35.8	43.7	52.2	64.0	70.3	75.2	83.3	88.6	92.0	93.8	95.4	97.5	99.2	99.3	100.0

TOTAL NUMBER OF OBSERVATIONS 883

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/

CEILING VERSUS VISIBILITY

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-70

J A
MONTH
1200-1700
HOURS

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/8	≥ 1/16	≥ 1/32	≥ 0
NO CEILING		8.5	9.7	11.1	12.6	14.3	15.1	16.0	16.5	17.0	17.1	17.2	17.5	17.6	17.6	17.6
≥ 20000		12.1	14.2	16.2	18.4	20.3	21.6	23.5	24.1	25.1	25.6	25.7	26.2	26.4	26.4	26.4
≥ 18000		12.2	14.3	16.3	18.5	20.6	21.9	23.9	24.5	25.5	25.9	26.3	26.5	26.7	26.7	26.7
≥ 16000		12.2	14.3	16.3	18.5	20.6	21.9	23.9	24.5	25.5	25.9	26.3	26.5	26.7	26.7	26.7
≥ 14000		12.6	14.7	17.0	19.5	21.6	23.0	24.9	25.5	26.5	27.0	27.3	27.5	27.8	27.8	27.8
≥ 12000		13.1	15.4	17.8	20.6	22.7	24.1	26.1	26.6	27.8	28.2	28.4	28.8	29.0	29.0	29.0
≥ 10000		14.4	16.9	19.9	22.6	24.8	26.3	28.3	28.9	30.1	30.5	30.9	31.1	31.3	31.3	31.3
≥ 9000		14.6	17.5	20.5	23.4	25.8	27.5	29.7	30.4	31.5	32.0	32.2	32.6	32.8	32.8	32.8
≥ 8000		15.1	17.9	21.1	24.2	26.6	28.5	30.7	31.7	32.8	33.3	33.6	33.8	34.1	34.1	34.1
≥ 7000		15.5	18.4	21.7	24.9	27.5	29.7	32.1	33.1	34.3	34.7	35.1	35.3	35.8	35.8	35.8
≥ 6000		16.3	19.2	22.6	26.2	29.0	31.4	33.8	34.9	36.1	36.6	36.9	37.1	37.6	37.6	37.6
≥ 5000		18.2	21.3	24.9	28.8	31.9	34.4	36.9	37.9	39.3	39.8	40.1	40.3	40.8	40.8	40.8
≥ 4500		19.1	22.2	25.9	29.8	33.0	35.5	38.3	39.3	40.7	41.1	41.5	41.7	42.2	42.2	42.2
≥ 4000		20.5	23.8	27.9	32.6	35.9	38.5	41.7	43.0	44.6	45.1	45.5	45.9	46.4	46.4	46.4
≥ 3500		22.6	26.1	30.5	35.7	39.2	41.8	45.7	47.0	48.6	49.3	49.6	50.1	50.5	50.5	50.5
≥ 3000		27.3	31.1	36.0	42.5	46.6	49.4	53.7	55.1	56.7	57.4	57.7	58.2	58.7	58.7	58.7
≥ 2500		29.9	34.2	39.8	47.5	51.8	54.9	60.1	61.6	63.2	63.9	64.2	64.7	65.3	65.3	65.3
≥ 2000		33.1	37.9	44.1	53.8	58.4	61.7	68.0	69.7	71.3	72.1	72.5	72.9	73.5	73.5	73.5
≥ 1800		34.6	39.5	46.1	56.3	61.0	64.3	71.3	73.0	74.6	75.5	75.9	76.3	76.9	76.9	76.9
≥ 1500		36.7	41.9	49.3	60.2	65.1	68.7	76.1	78.1	80.2	81.3	81.7	82.5	83.1	83.1	83.1
≥ 1200		37.9	43.4	51.2	63.0	68.2	71.8	79.4	81.5	83.8	84.9	85.5	86.2	86.7	86.7	86.7
≥ 1000		38.6	44.3	52.3	64.3	69.6	73.1	81.3	83.4	85.8	87.0	87.5	88.2	88.8	88.8	88.8
≥ 900		38.7	44.5	52.5	64.5	69.8	73.4	81.7	83.9	86.3	87.4	88.0	88.7	89.3	89.3	89.3
≥ 800		38.9	44.7	52.9	65.5	70.9	74.4	83.2	85.4	87.8	88.9	89.5	90.2	90.7	90.7	90.7
≥ 700		38.9	44.7	53.0	65.6	71.0	74.7	83.5	85.8	88.2	89.4	89.9	90.7	91.3	91.4	91.4
≥ 600		38.9	44.7	53.0	65.6	71.0	74.7	83.5	86.2	88.7	89.9	90.5	91.3	92.1	92.2	92.2
≥ 500		38.9	44.7	53.0	65.6	71.1	74.9	84.2	86.9	89.6	91.1	91.7	92.5	93.5	93.6	93.6
≥ 400		38.9	44.7	53.0	65.6	71.1	75.0	84.9	87.8	90.6	92.3	93.0	93.8	94.9	95.0	95.0
≥ 300		38.9	44.7	53.0	65.6	71.1	75.1	85.0	87.9	91.3	93.5	94.4	96.1	97.4	97.6	97.6
≥ 200		38.9	44.7	53.0	65.6	71.1	75.1	85.0	88.1	91.9	94.2	95.1	97.0	98.9	99.2	99.2
≥ 100		38.9	44.7	53.0	65.6	71.1	75.1	85.0	88.1	91.9	94.3	95.2	97.1	99.0	99.3	99.3
≥ 0		38.9	44.7	53.0	65.6	71.1	75.1	85.0	88.1	91.9	94.3	95.2	97.3	99.1	99.5	100.0

TOTAL NUMBER OF OBSERVATIONS 875

2

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATIONRHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME07-76
YEARSJA.
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1500-2000
HOURS U.S.T.

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥16	≥1	≥0
NO CEILING		11.6	12.6	15.2	18.2	19.2	19.9	21.2	21.8	22.1	22.1	22.1	22.2	22.2	22.2	22.6
≥ 20000		13.8	15.2	18.1	21.6	22.7	23.4	24.8	25.6	26.0	26.0	26.1	26.2	26.2	26.2	26.5
IV 18000		13.8	15.2	18.1	21.7	22.8	23.5	24.9	25.7	26.1	26.1	26.2	26.3	26.3	26.3	26.6
IV 16000		13.8	15.2	18.1	21.7	22.8	23.5	24.9	25.7	26.1	26.1	26.2	26.3	26.3	26.3	26.6
IV 14000		14.0	15.6	18.5	22.4	23.5	24.2	25.6	26.4	26.7	26.7	26.9	27.0	27.0	27.0	27.3
IV 12000		15.2	17.0	20.0	23.8	24.9	25.6	27.1	27.9	28.2	28.2	28.3	28.4	28.4	28.4	28.8
IV 10000		16.1	17.9	21.7	26.1	27.4	28.1	29.4	30.3	30.7	30.7	30.9	30.9	30.9	30.9	31.2
IV 9000		16.3	18.3	22.2	26.9	28.2	29.0	30.6	31.3	31.7	31.7	31.9	31.9	31.9	31.9	32.2
IV 8000		16.5	18.5	22.6	27.3	28.7	29.4	31.0	31.8	32.1	32.1	32.2	32.4	32.4	32.4	32.7
IV 7000		17.3	19.3	23.4	28.3	29.7	30.7	32.4	33.1	33.5	33.5	33.6	33.7	33.7	33.7	34.0
IV 6000		18.5	21.0	25.2	30.4	31.8	32.8	34.7	35.5	36.2	36.3	36.4	36.5	36.5	36.5	36.9
IV 5000		21.2	23.5	27.8	33.6	35.1	36.2	38.1	38.9	39.6	39.8	39.9	40.0	40.0	40.0	40.3
IV 4500		23.9	26.2	30.7	36.9	38.3	39.6	41.8	42.6	43.3	43.5	43.5	43.7	43.7	43.7	44.0
IV 4000		25.6	28.3	33.0	39.6	41.1	42.5	45.2	46.0	46.6	46.9	47.0	47.1	47.1	47.1	47.4
IV 3500		27.9	30.7	36.0	42.8	44.4	45.8	49.1	50.1	50.9	51.1	51.3	51.5	51.5	51.5	51.8
IV 3000		32.3	36.2	42.1	50.0	52.0	53.7	57.1	58.1	59.0	59.3	59.7	59.8	59.8	59.8	60.1
IV 2500		36.3	39.7	46.3	55.6	57.8	59.6	63.1	64.3	65.2	65.5	65.8	66.0	66.0	66.0	66.3
IV 2000		40.9	44.8	51.9	62.7	65.5	67.8	72.2	73.4	74.3	74.6	74.9	75.1	75.1	75.1	75.4
IV 1800		42.2	46.2	53.6	64.6	67.8	70.0	74.7	75.8	76.7	77.1	77.4	77.5	77.5	77.5	77.9
IV 1500		44.7	49.3	57.1	69.2	72.7	75.3	81.1	82.2	83.1	83.5	83.8	83.9	83.9	83.9	84.3
IV 1200		45.1	49.9	57.9	70.8	74.4	77.1	83.4	84.7	85.6	86.0	86.3	86.4	86.4	86.4	86.7
IV 1000		45.2	50.2	58.9	72.6	76.3	79.0	86.1	87.5	88.4	88.8	89.1	89.2	89.2	89.2	89.6
IV 900		45.2	50.4	59.3	73.4	77.1	79.8	86.9	88.4	89.3	89.7	90.0	90.1	90.1	90.1	90.4
IV 800		45.3	50.8	60.0	74.4	78.1	80.9	88.1	89.7	90.6	90.9	91.2	91.3	91.3	91.3	91.7
IV 700		45.3	50.8	60.2	74.6	78.4	81.2	88.5	90.1	91.1	91.5	91.8	91.9	92.0	92.0	92.4
IV 600		45.3	50.8	60.2	74.7	78.5	81.6	89.2	90.8	91.8	92.1	92.6	92.8	92.9	92.9	93.4
IV 500		45.3	50.8	60.2	74.7	78.5	81.6	90.1	91.8	92.8	93.1	93.6	93.8	94.2	94.2	94.6
IV 400		45.3	50.9	60.3	74.8	78.7	81.7	90.3	92.2	93.4	93.7	94.3	94.5	94.8	94.8	95.3
IV 300		45.3	50.9	60.3	74.8	78.7	82.0	91.1	93.1	94.9	96.0	96.9	97.1	97.4	97.4	97.9
IV 200		45.3	50.9	60.3	74.8	78.8	82.1	91.2	93.4	95.3	96.4	97.4	97.5	97.9	97.9	98.4
IV 100		45.3	50.9	60.3	74.8	78.8	82.1	91.2	93.4	95.3	96.4	97.4	97.5	97.9	98.2	98.8
IV 0		45.3	50.9	60.3	74.8	78.8	82.1	91.2	93.4	95.3	96.4	97.5	97.9	98.2	98.4	100.0

TOTAL NUMBER OF OBSERVATIONS 890

USAF ETAC FORM 0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 07-76

JA

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

2100-300
HOURS 1ST

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2.5	≥ 2	≥ 1.5	≥ 1.0	≥ 0.5	≥ 0.25	≥ 0.15	≥ 0.1	≥ 0.05	≥ 0.025	≥ 0.01
NO CEILING		12.0	13.0	15.8	18.5	19.2	20.8	21.5	21.7	22.0	22.2	22.4	22.6	22.6	22.7	22.7
≥ 20000		13.1	14.4	17.3	20.8	21.6	23.5	24.6	24.9	25.3	25.5	25.6	25.8	25.8	26.0	26.0
≥ 18000		13.4	14.6	17.5	21.0	21.8	23.7	24.8	25.2	25.5	25.7	25.8	26.1	26.1	26.2	26.2
≥ 16000		13.4	14.6	17.5	21.0	21.8	23.7	24.8	25.2	25.5	25.7	25.8	26.1	26.1	26.2	26.2
≥ 14000		13.5	14.7	17.6	21.1	21.9	23.8	24.9	25.3	25.6	25.8	26.0	26.2	26.2	26.3	26.3
≥ 12000		14.5	15.7	19.1	22.9	23.7	25.6	26.7	27.1	27.4	27.6	27.8	28.0	28.0	28.1	28.1
≥ 10000		16.5	18.0	21.9	25.8	26.9	28.8	30.2	30.6	30.9	31.1	31.2	31.5	31.5	31.6	31.6
≥ 9000		16.6	18.4	22.4	26.3	27.3	29.2	31.0	31.3	31.7	31.9	32.0	32.2	32.2	32.4	32.4
≥ 8000		17.1	19.0	22.9	27.1	28.2	30.1	31.9	32.2	32.6	32.8	32.9	33.1	33.1	33.3	33.3
≥ 7000		18.7	20.6	24.5	28.8	29.9	31.8	33.7	34.0	34.4	34.6	34.7	34.9	34.9	35.1	35.1
≥ 6000		21.2	23.5	27.4	31.8	33.1	35.1	37.3	37.8	38.4	38.7	38.8	39.0	39.0	39.1	39.1
≥ 5000		22.7	25.1	29.2	34.2	35.7	37.9	40.2	40.7	41.3	41.6	41.7	41.9	41.9	42.0	42.0
≥ 4500		23.9	26.4	30.7	35.7	37.3	39.6	42.2	42.7	43.4	43.6	43.7	43.9	43.9	44.0	44.0
≥ 4000		25.5	28.3	32.8	38.5	40.1	42.7	46.1	46.5	47.2	47.4	47.5	47.8	47.8	47.9	47.9
≥ 3500		27.9	30.8	35.5	41.5	43.0	45.6	49.3	49.8	50.4	50.7	50.8	51.0	51.0	51.1	51.1
≥ 3000		31.7	34.9	40.9	47.8	49.8	52.8	56.7	57.2	58.1	58.4	58.5	58.8	58.8	58.9	58.9
≥ 2500		34.5	37.9	44.7	52.1	54.5	57.8	61.9	62.5	63.4	63.7	63.8	64.0	64.0	64.2	64.2
≥ 2000		39.0	42.4	49.9	58.8	61.9	65.3	69.7	70.3	71.2	71.6	71.7	71.9	71.9	72.0	72.0
≥ 1800		39.9	43.6	51.8	61.6	64.7	68.1	72.7	73.4	74.3	74.6	74.7	74.9	74.9	75.1	75.1
≥ 1500		41.7	45.7	54.9	65.4	68.8	72.4	77.4	78.3	79.2	79.6	79.7	79.9	79.9	80.0	80.0
≥ 1200		42.7	47.0	56.6	68.2	72.2	76.1	81.6	83.0	83.9	84.3	84.4	84.6	84.6	84.7	84.7
≥ 1000		42.9	47.3	57.8	69.9	73.9	78.1	83.7	85.4	86.3	86.6	86.7	87.0	87.0	87.1	87.1
≥ 900		42.9	47.6	58.3	70.7	74.7	79.0	84.7	86.4	87.3	87.6	87.8	88.0	88.0	88.1	88.1
≥ 800		43.0	47.8	58.9	71.8	76.0	80.2	86.2	87.9	88.8	89.1	89.2	89.4	89.4	89.6	89.6
≥ 700		43.0	47.8	59.1	72.5	76.6	80.9	87.2	89.2	90.2	90.6	90.8	91.0	91.1	91.3	91.3
≥ 600		43.0	47.8	59.1	72.7	77.2	81.5	88.0	90.1	91.1	91.6	91.8	92.1	92.2	92.5	92.5
≥ 500		43.0	47.8	59.1	72.8	77.4	81.7	88.7	91.0	92.1	92.6	92.8	93.1	93.6	93.8	93.8
≥ 400		43.0	47.8	59.1	73.0	77.8	82.1	89.6	92.4	93.6	94.0	94.2	94.6	95.1	95.3	95.3
≥ 300		43.0	47.8	59.1	73.3	78.0	82.6	90.7	93.6	94.9	95.5	95.7	96.2	96.6	96.9	96.9
≥ 200		43.0	47.8	59.1	73.3	78.0	82.6	90.8	93.8	95.3	95.8	96.3	97.0	97.6	98.0	98.1
≥ 100		43.0	47.8	59.1	73.3	78.0	82.6	90.8	93.8	95.3	96.0	96.4	97.1	98.1	98.4	98.7
≥ 0		43.0	47.8	59.1	73.3	78.0	82.6	90.8	93.8	95.3	96.0	96.5	97.2	98.2	98.5	100.0

TOTAL NUMBER OF OBSERVATIONS 890

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76

FE.

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0000-0200
HOURS LST

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1	≥¾	≥½	≥¼	≥⅓	≥⅕	≥⅒	≥0
NO CEILING		19.3	22.1	26.9	31.5	32.7	33.2	34.2	34.7	35.2	35.3	35.4	35.5	35.5	35.5	35.9
≥ 20000		20.7	23.9	29.1	34.7	36.0	36.5	37.7	38.2	38.8	39.0	39.0	39.1	39.1	39.1	39.5
IV 18000		20.7	23.9	29.1	34.7	36.0	36.5	37.7	38.2	38.8	39.0	39.0	39.1	39.1	39.1	39.5
I/ 16000		20.7	23.9	29.1	34.7	36.0	36.5	37.7	38.2	38.8	39.0	39.0	39.1	39.1	39.1	39.5
IV 14000		21.2	24.4	29.8	35.5	36.7	37.2	38.5	39.0	39.6	39.7	39.7	39.8	39.8	39.8	40.2
IV 12000		21.4	25.1	30.7	36.3	37.7	38.2	39.5	40.0	40.6	40.7	40.7	40.9	40.9	40.9	41.2
IV 10000		22.6	26.2	32.1	38.2	39.6	40.1	41.4	41.9	42.5	42.7	42.7	42.9	42.9	42.9	43.2
IV 9000		22.4	26.6	32.8	39.1	40.5	41.0	42.2	42.7	43.4	43.6	43.6	43.7	43.7	43.7	44.1
IV 8000		23.4	27.1	33.3	39.6	41.0	41.5	42.7	43.2	43.9	44.1	44.1	44.2	44.2	44.2	44.6
IV 7000		24.7	28.4	34.8	41.4	42.7	43.2	44.6	45.1	45.9	46.1	46.1	46.2	46.2	46.2	46.6
IV 6000		26.2	30.1	36.6	43.2	44.6	45.1	46.6	47.1	48.1	48.4	48.4	48.5	48.5	48.5	48.9
IV 5000		27.7	31.8	38.8	46.0	47.4	47.9	49.4	50.0	51.0	51.3	51.3	51.4	51.4	51.4	51.9
IV 4500		31.1	35.3	42.6	51.0	52.6	53.4	55.1	55.8	56.8	57.0	57.0	57.1	57.1	57.1	57.5
IV 4000		32.7	37.5	44.7	53.8	55.5	56.3	58.1	58.8	59.8	60.0	60.0	60.2	60.2	60.2	60.5
IV 3500		35.5	40.2	47.7	57.3	59.0	59.8	62.0	62.7	63.7	63.9	63.9	64.0	64.0	64.0	64.4
IV 3000		39.0	44.2	52.4	62.5	64.5	65.3	67.9	68.8	69.8	70.1	70.1	70.2	70.2	70.2	70.6
IV 2500		41.6	47.0	56.1	66.5	69.3	70.7	73.7	74.6	75.6	75.8	75.8	75.9	75.9	75.9	76.3
IV 2000		44.1	49.7	59.0	69.9	72.9	74.3	77.4	78.3	79.3	79.6	79.6	79.7	79.7	79.7	80.1
IV 1800		45.5	51.4	60.8	72.2	75.9	77.4	80.8	81.7	82.7	83.0	83.0	83.1	83.1	83.1	83.5
IV 1500		47.0	52.9	62.7	74.9	78.8	80.5	84.5	85.5	86.5	86.7	86.7	86.8	86.8	86.8	87.2
IV 1200		47.5	53.4	63.4	76.8	80.7	82.6	87.1	88.1	89.1	89.5	89.5	89.6	89.6	89.6	90.0
IV 1000		47.5	53.5	63.8	77.0	81.7	83.7	88.6	89.6	90.6	91.0	91.0	91.1	91.1	91.1	91.5
IV 900		47.5	53.8	64.4	76.3	82.6	84.7	89.6	90.6	91.4	92.0	92.0	92.1	92.1	92.1	92.5
IV 800		47.5	53.8	64.4	73.6	82.8	85.0	89.8	91.0	92.0	92.4	92.4	92.5	92.5	92.5	92.9
IV 700		47.5	53.8	64.5	76.9	83.2	85.3	90.4	91.5	92.5	92.9	92.9	93.0	93.0	93.0	93.4
IV 600		47.5	53.8	64.7	79.1	83.5	85.6	91.0	92.1	93.2	93.6	93.6	93.7	93.7	93.7	94.1
IV 500		47.5	53.8	64.7	79.2	83.6	86.0	91.4	92.5	93.7	94.1	94.1	94.2	94.2	94.2	94.6
IV 400		47.5	53.8	64.7	79.2	83.6	86.0	91.7	92.9	94.1	94.5	94.5	94.6	94.6	94.6	95.0
IV 300		47.5	53.8	64.7	79.3	83.7	86.1	92.7	94.2	95.7	96.2	96.2	96.4	96.5	96.5	97.0
IV 200		47.5	53.8	64.7	79.3	83.7	86.1	92.9	94.5	96.0	96.7	97.0	97.2	97.5	97.5	98.0
IV 100		47.5	53.8	64.7	79.3	83.7	86.1	92.9	94.6	96.1	97.0	97.2	97.5	97.9	98.0	99.0
IV 0		47.5	53.8	64.7	79.3	83.7	86.1	92.9	94.7	96.2	97.2	97.5	97.9	98.5	98.7	100.0

TOTAL NUMBER OF OBSERVATIONS 798

2

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 57-76

FEET

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

2300-0300
HOURS

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ 1/32	≥ 0
NO CEILING		16.6	19.0	23.2	28.4	29.4	29.9	31.5	32.1	32.5	32.6	32.9	32.9	32.9	33.0	33.3
≥ 20000		18.9	21.3	26.1	31.8	33.0	33.6	35.5	36.2	36.6	36.7	36.8	37.0	37.0	37.1	37.3
≥ 18000		18.9	21.3	26.1	31.8	33.0	33.6	35.5	36.2	36.6	36.7	36.8	37.0	37.0	37.1	37.3
≥ 16000		18.9	21.3	26.1	31.8	33.0	33.6	35.5	36.2	36.6	36.7	36.8	37.0	37.0	37.1	37.3
≥ 14000		19.0	21.5	26.2	31.9	33.1	33.7	35.6	36.4	36.7	36.8	37.0	37.1	37.1	37.2	37.5
≥ 12000		19.6	22.5	27.2	32.9	34.1	34.7	36.6	37.3	37.7	37.8	38.0	38.1	38.1	38.2	38.5
≥ 10000		20.8	23.9	28.8	34.5	35.9	36.5	38.6	39.3	39.8	40.0	40.1	40.2	40.2	40.3	40.6
≥ 9000		21.3	24.4	29.8	35.7	37.1	37.7	39.9	40.6	41.1	41.2	41.2	41.4	41.4	41.6	41.8
≥ 8000		21.5	24.6	30.0	36.0	37.3	38.0	40.1	40.8	41.3	41.4	41.4	41.7	41.7	41.8	42.1
≥ 7000		22.6	25.7	31.4	37.7	39.1	39.7	41.8	42.6	42.1	43.2	43.3	43.4	43.4	43.5	43.8
≥ 6000		24.8	27.9	34.4	40.9	42.3	42.9	45.0	45.8	46.3	46.3	46.7	46.8	46.8	46.9	47.1
≥ 5000		27.5	30.8	38.1	45.0	46.4	47.0	49.6	50.4	50.9	51.1	51.2	51.5	51.5	51.6	51.9
≥ 4500		30.1	33.7	41.6	49.1	50.5	51.4	54.0	54.7	55.2	55.5	55.6	55.8	55.8	56.0	56.2
≥ 4000		32.1	36.4	44.4	52.5	54.0	55.0	57.6	58.3	58.8	59.1	59.2	59.4	59.4	59.6	59.8
≥ 3500		35.2	39.6	47.8	56.0	57.6	58.6	61.2	61.9	62.4	62.7	62.8	63.0	63.0	63.2	63.4
≥ 3000		39.3	43.7	52.5	60.9	62.5	63.5	66.2	67.1	67.6	67.9	68.0	68.2	68.2	68.4	68.6
≥ 2500		41.1	46.2	55.5	64.6	66.6	67.9	71.3	72.3	72.8	73.1	73.2	73.4	73.4	73.6	73.8
≥ 2000		43.7	49.0	58.7	69.1	71.5	72.0	77.2	78.3	78.8	79.0	79.2	79.4	79.4	79.5	79.8
≥ 1800		44.0	49.4	59.1	70.1	73.0	74.8	79.4	80.5	81.0	81.3	81.4	81.6	81.6	81.8	82.0
≥ 1500		45.0	50.4	60.2	72.0	75.1	77.0	81.9	82.0	83.5	83.7	83.9	84.1	84.1	84.2	84.5
≥ 1200		45.9	51.0	61.5	73.6	77.0	79.0	84.0	85.1	85.7	86.0	86.1	86.4	86.4	86.5	86.7
≥ 1000		46.2	52.1	62.3	74.4	78.0	80.1	85.5	86.7	87.3	87.6	87.7	88.0	88.0	88.1	88.3
≥ 900		46.3	52.2	62.8	75.1	78.7	80.8	86.1	87.3	88.0	88.2	88.3	88.6	88.6	88.7	89.0
≥ 800		46.3	52.2	62.9	75.4	79.0	81.1	86.7	88.1	89.0	89.2	89.5	89.7	89.7	89.8	90.1
≥ 700		46.3	52.2	62.9	75.9	79.7	81.9	87.5	88.8	89.8	90.1	90.3	90.6	90.6	90.7	90.9
≥ 600		46.3	52.2	62.9	75.9	79.9	82.5	88.6	90.0	91.2	91.4	91.7	91.9	91.9	92.1	92.3
≥ 500		46.3	52.2	62.9	75.9	80.3	83.3	89.6	91.2	92.6	92.8	93.1	93.3	93.3	93.4	93.7
≥ 400		46.3	52.2	62.9	76.2	80.8	84.4	91.3	93.1	94.4	94.7	94.9	95.2	95.2	95.3	95.5
≥ 300		46.3	52.2	62.9	76.3	81.0	84.6	91.8	93.9	95.4	95.8	96.0	96.3	96.3	96.4	96.7
≥ 200		46.3	52.2	62.9	76.3	81.0	84.6	91.8	93.9	95.7	96.5	96.9	97.1	97.1	97.3	97.8
≥ 100		46.3	52.2	62.9	76.3	81.0	84.6	91.8	93.9	95.9	96.8	97.2	97.5	97.5	97.9	99.0
≥ 0		46.3	52.2	62.9	76.3	81.0	84.6	91.8	93.9	95.9	96.8	97.2	97.5	98.1	98.3	100.0

TOTAL NUMBER OF OBSERVATIONS

806

2
DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 07-70

FE.

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0000-0800
HOURS 15

CEILING FEET	VISIBILITY STATUTE MILES															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2.5	≥ 2	≥ 1.5	≥ 1	≥ 0.5	≥ 0.25	≥ 0.15	≥ 0.1	≥ 0.05	≥ 0.025	≥ 0.01
NO CEILING		10.0	12.4	16.1	20.5	22.1	23.5	26.9	27.3	28.3	28.4	28.5	28.7	27.8	28.0	28.8
≥ 20000		11.9	14.3	18.2	23.4	25.3	26.9	30.7	31.1	32.1	32.3	32.4	32.6	32.8	32.8	32.9
≥ 18000		11.9	14.3	18.2	23.4	25.3	26.9	30.7	31.1	32.1	32.3	32.4	32.6	32.8	32.8	32.9
≥ 16000		11.9	14.3	18.2	23.4	25.3	26.9	30.7	31.1	32.1	32.3	32.4	32.6	32.8	32.8	32.9
≥ 14000		12.0	14.5	18.3	23.5	25.5	27.1	30.9	31.4	32.4	32.5	32.6	32.9	33.0	33.0	33.0
≥ 12000		12.9	15.5	19.5	25.2	27.4	29.0	32.9	33.4	34.4	34.5	34.6	34.9	35.0	35.0	35.0
≥ 10000		14.1	17.1	21.4	27.6	29.9	31.5	35.7	36.3	37.5	37.6	37.7	37.9	38.2	38.2	38.2
≥ 9000		14.2	17.3	21.6	28.1	30.4	32.0	36.2	36.8	37.9	38.1	38.2	38.4	38.7	38.7	39.7
≥ 8000		14.5	17.6	21.9	28.3	30.7	32.3	36.6	37.3	38.4	38.6	38.7	38.9	39.2	39.2	39.2
≥ 7000		15.1	18.3	22.6	29.3	31.6	33.3	37.7	38.4	39.6	39.7	39.9	40.0	40.3	40.3	40.3
≥ 6000		16.1	19.4	24.0	30.8	33.1	34.7	39.3	40.0	41.2	41.4	41.5	41.8	42.0	42.0	42.0
≥ 5000		18.2	22.0	26.8	34.0	36.5	38.2	42.9	43.9	45.0	45.4	45.5	45.7	46.0	46.0	46.0
≥ 4500		19.9	24.2	29.0	36.7	39.3	41.2	46.2	47.2	48.3	48.7	48.8	49.1	49.3	49.3	49.3
≥ 4000		23.4	27.9	33.1	41.0	43.8	45.7	51.3	52.3	53.4	53.6	53.9	54.1	54.4	54.4	54.4
≥ 3500		25.1	30.0	35.5	44.0	46.7	49.1	54.6	55.6	56.9	57.2	57.4	57.6	57.8	57.8	57.8
≥ 3000		27.2	32.5	38.4	47.3	50.3	53.0	59.3	60.4	61.8	62.2	62.3	62.5	62.8	62.8	62.8
≥ 2500		29.7	35.5	41.9	51.3	54.4	57.7	64.6	65.9	67.4	67.9	68.0	68.2	68.5	68.5	68.5
≥ 2000		31.9	38.6	45.5	56.2	59.7	63.0	70.5	71.7	73.3	73.8	73.9	74.2	74.4	74.4	74.4
≥ 1800		32.6	39.4	46.6	58.0	61.6	65.1	72.8	74.3	76.0	76.6	76.8	77.0	77.3	77.3	77.3
≥ 1500		33.9	41.2	48.7	60.9	64.8	68.5	76.9	78.6	80.3	81.0	81.1	81.3	81.6	81.6	81.6
≥ 1200		34.5	42.0	50.3	62.9	66.9	71.1	80.0	82.0	83.8	84.4	84.5	84.8	85.0	85.0	85.0
≥ 1000		34.7	42.4	50.8	63.4	67.4	71.8	81.0	83.1	84.9	85.5	85.7	85.9	86.2	86.2	86.2
≥ 900		34.7	42.4	51.1	63.9	68.1	73.1	82.6	84.7	86.5	87.1	87.3	87.5	87.8	87.8	87.8
≥ 800		34.7	42.4	51.1	63.9	68.2	73.3	83.1	85.4	87.3	87.9	88.0	88.3	88.5	88.5	88.5
≥ 700		34.7	42.4	51.2	64.4	69.0	74.0	84.3	86.7	88.5	89.2	89.5	89.7	90.0	90.0	90.0
≥ 600		34.7	42.4	51.2	64.4	69.1	74.3	85.0	87.6	89.9	90.6	90.9	91.1	91.3	91.3	91.3
≥ 500		34.7	42.4	51.2	64.5	69.2	74.9	85.9	88.9	91.1	91.8	92.1	92.3	92.6	92.6	92.6
≥ 400		34.7	42.4	51.2	64.5	69.2	75.0	86.7	89.6	92.0	93.2	93.4	93.9	94.2	94.2	94.2
≥ 300		34.7	42.4	51.2	64.5	69.2	75.0	87.1	90.6	93.2	94.8	95.1	95.7	96.5	96.5	96.5
≥ 200		34.7	42.4	51.2	64.5	69.2	75.0	87.1	90.9	93.4	95.1	95.4	96.3	97.2	97.2	97.2
≥ 100		34.7	42.4	51.2	64.5	69.2	75.0	87.1	90.9	93.4	95.1	95.4	96.3	97.2	97.2	97.2
≥ 0		34.7	42.4	51.2	64.5	69.2	75.0	87.1	90.9	93.4	95.4	95.8	96.7	98.1	98.4	100.0

TOTAL NUMBER OF OBSERVATIONS. 809

2

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032

RHEIN-MAIN APT GERMANY/FRANKFURT

07-76

FF

STATION

STATION NAME

YEARS

MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0900-1100

HOURS LST

CEILING (FEET)	VISIBILITY STATUTE MILES															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1	≥1	≥½	≥½	≥½	≥½	≥½	≥0
NO CEILING		13.1	14.4	16.0	21.2	27.6	24.4	26.7	26.5	27.0	27.0	27.0	27.1	27.1	27.1	27.2
≥ 20000		16.7	18.3	20.7	27.5	29.3	31.4	33.9	34.2	34.8	34.8	34.8	34.9	34.9	34.9	35.0
≥ 18000		16.7	18.3	20.7	27.5	29.3	31.4	34.0	34.3	34.9	34.9	34.9	35.0	35.0	35.0	35.1
≥ 16000		16.7	18.3	20.7	27.6	29.5	31.6	34.2	34.4	35.0	35.0	35.0	35.1	35.1	35.1	35.3
≥ 14000		17.1	18.7	21.2	28.2	30.1	32.2	34.9	35.1	35.8	35.8	35.8	35.9	35.9	35.9	36.0
≥ 12000		18.1	20.4	23.1	30.6	32.5	34.7	37.4	37.6	38.2	38.2	38.2	38.4	38.4	38.4	38.5
≥ 10000		18.8	21.5	24.8	33.3	35.5	37.7	40.7	41.0	41.6	41.6	41.6	41.7	41.7	41.7	41.8
≥ 9000		19.2	21.9	25.4	34.0	36.4	38.6	41.6	41.8	42.5	42.5	42.5	42.6	42.6	42.6	42.7
≥ 8000		19.3	22.0	25.5	34.2	36.5	38.7	42.0	42.2	42.8	42.8	42.8	42.9	42.9	42.9	43.1
≥ 7000		19.6	22.4	26.0	34.9	37.4	39.6	42.9	43.3	43.9	43.9	43.9	44.1	44.1	44.1	44.2
≥ 6000		20.2	23.1	27.1	36.3	38.9	41.5	44.9	45.3	45.9	45.9	45.9	46.0	46.0	46.0	46.2
≥ 5000		21.9	25.0	29.2	38.6	41.2	44.3	48.0	48.6	49.4	49.4	49.4	49.5	49.5	49.5	49.6
≥ 4500		22.5	25.7	30.0	39.7	42.6	45.8	49.6	50.2	51.0	51.0	51.0	51.1	51.1	51.1	51.2
≥ 4000		24.9	28.6	33.4	43.8	46.9	51.0	54.8	55.6	56.3	56.4	56.4	56.6	56.6	56.6	56.7
≥ 3500		26.1	30.1	35.3	46.3	49.5	53.6	57.5	58.4	59.4	59.5	59.5	59.7	59.7	59.7	59.8
≥ 3000		27.6	31.9	37.9	49.6	53.1	57.3	62.1	63.2	64.4	64.5	64.5	64.6	64.6	64.6	64.7
≥ 2500		30.3	35.0	42.1	54.8	59.3	64.0	68.9	70.0	71.2	71.3	71.3	71.4	71.4	71.4	71.5
≥ 2000		33.0	38.0	45.5	59.5	64.2	69.1	74.3	75.5	76.7	77.1	77.1	77.2	77.2	77.2	77.4
≥ 1800		33.5	38.5	46.2	60.4	65.1	69.9	75.5	76.7	78.0	78.3	78.3	78.5	78.5	78.5	78.6
≥ 1500		34.4	40.2	48.6	64.1	69.1	74.3	80.9	82.3	83.5	83.9	84.0	84.2	84.2	84.2	84.3
≥ 1200		34.4	40.5	49.1	64.9	69.9	75.0	83.4	84.8	86.1	86.5	86.6	86.8	86.8	86.8	86.9
≥ 1000		34.9	41.0	50.0	66.7	72.0	78.1	85.8	87.3	88.6	89.1	89.2	89.4	89.4	89.4	89.5
≥ 900		35.0	41.1	50.1	66.8	72.2	78.2	86.0	87.5	88.9	89.4	89.5	89.6	89.6	89.6	89.7
≥ 800		35.1	41.2	50.2	67.0	72.4	78.8	86.9	88.4	89.7	90.3	90.5	90.6	90.6	90.6	90.7
≥ 700		35.4	41.5	50.5	67.3	72.8	79.3	87.6	89.2	90.6	91.5	91.6	91.7	91.8	91.8	92.0
≥ 600		35.6	41.7	50.9	67.7	73.1	79.7	88.6	90.2	91.6	92.5	92.6	92.7	92.8	92.8	92.9
≥ 500		35.6	41.7	50.9	67.7	73.3	80.0	89.0	90.7	92.2	93.3	93.6	93.7	93.8	93.8	93.9
≥ 400		35.6	41.7	50.9	67.7	73.4	80.1	89.6	91.3	92.9	94.6	95.2	95.3	95.5	95.5	95.7
≥ 300		35.6	41.7	50.9	67.7	73.4	80.1	89.6	91.5	93.3	95.0	96.0	96.8	97.5	97.5	97.6
≥ 200		35.6	41.7	50.9	67.7	73.4	80.1	89.6	91.5	93.4	95.3	96.8	97.5	98.5	98.6	98.9
≥ 100		35.6	41.7	50.9	67.7	73.4	80.1	89.6	91.5	93.4	95.3	96.9	97.8	98.8	98.9	99.8
≥ 0		35.6	41.7	50.9	67.7	73.4	80.1	89.6	91.5	93.4	95.3	96.9	97.9	99.0	99.1	100.0

TOTAL NUMBER OF OBSERVATIONS

808

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 07-76

FE

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1200-1400
HOURS LT

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥1/5	≥1/10	≥0
NO CEILING		15.8	17.5	20.7	22.5	23.7	24.1	24.7	24.7	25.0	25.0	25.0	25.0	25.0	25.0	25.0
≥ 20000		21.2	23.1	27.3	30.8	32.0	33.0	34.4	34.4	34.7	34.7	34.7	34.7	34.7	34.7	34.7
≥ 18000		21.5	23.4	27.6	31.1	32.3	33.3	34.7	34.7	34.9	34.9	34.9	34.9	34.9	34.9	34.9
≥ 16000		21.5	23.4	27.6	31.1	32.3	33.3	34.7	34.7	34.9	34.9	34.9	34.9	34.9	34.9	34.9
≥ 14000		22.0	23.9	28.1	31.8	33.3	34.0	35.4	35.4	35.7	35.7	35.7	35.7	35.7	35.7	35.7
≥ 12000		23.1	25.3	29.9	34.5	35.8	36.8	38.1	38.1	38.4	38.4	38.4	38.4	38.4	38.4	38.4
≥ 10000		24.5	27.0	31.8	37.4	38.6	39.6	41.1	41.1	41.4	41.4	41.4	41.4	41.4	41.4	41.4
≥ 9000		25.3	27.8	32.9	38.9	40.1	41.1	42.7	42.7	43.0	43.0	43.0	43.0	43.0	43.0	43.0
≥ 8000		25.7	28.2	33.4	39.6	40.9	42.0	43.7	43.7	44.0	44.0	44.0	44.0	44.0	44.0	44.0
≥ 7000		26.0	28.6	34.0	40.4	41.6	42.7	44.6	44.6	44.8	44.8	44.8	44.8	44.8	44.8	44.8
≥ 6000		28.4	31.2	36.8	43.4	44.6	45.7	47.7	47.7	48.0	48.0	48.0	48.0	48.0	48.0	48.0
≥ 5000		30.7	34.0	39.6	46.5	47.7	48.9	50.9	50.9	51.2	51.2	51.2	51.2	51.2	51.2	51.2
≥ 4500		31.2	34.5	40.2	47.2	48.6	49.8	51.8	51.8	52.0	52.0	52.0	52.0	52.0	52.0	52.0
≥ 4000		34.3	38.0	44.0	51.6	53.2	54.8	57.1	57.1	57.4	57.4	57.4	57.4	57.4	57.4	57.4
≥ 3500		38.5	42.4	48.3	55.9	57.8	59.4	61.9	61.9	62.1	62.1	62.1	62.1	62.1	62.1	62.1
≥ 3000		42.5	47.2	53.8	61.9	64.0	65.6	68.3	68.6	68.9	68.9	68.9	68.9	68.9	68.9	68.9
≥ 2500		45.6	50.7	58.0	66.2	68.6	70.2	73.5	73.8	74.2	74.2	74.2	74.2	74.2	74.2	74.2
≥ 2000		48.9	54.7	62.6	71.9	74.4	76.3	79.8	80.1	80.6	80.6	80.6	80.6	80.6	80.6	80.6
≥ 1800		49.0	55.7	64.0	73.9	76.6	79.1	82.9	83.2	83.7	83.7	83.7	83.7	83.7	83.7	83.7
≥ 1500		50.7	57.0	66.0	76.9	80.0	83.2	87.2	87.6	88.2	88.2	88.3	88.3	88.3	88.3	88.3
≥ 1200		50.8	57.3	66.6	77.9	81.1	84.8	88.9	89.6	90.6	90.7	90.8	90.8	90.8	90.8	90.8
≥ 1000		50.9	57.4	67.0	79.0	82.4	86.2	90.7	91.4	92.5	92.8	93.0	93.0	93.0	93.0	93.0
≥ 900		51.1	57.5	67.1	79.1	82.5	86.3	90.9	91.7	92.9	93.2	93.4	93.4	93.4	93.4	93.4
≥ 800		51.2	57.6	67.2	79.3	82.6	86.5	91.3	92.2	93.5	93.8	94.0	94.0	94.0	94.0	94.0
≥ 700		51.2	57.6	67.2	79.3	82.7	86.6	91.7	92.7	94.4	94.7	94.9	95.0	95.0	95.0	95.0
≥ 600		51.2	57.6	67.2	79.3	82.7	86.6	91.7	92.7	94.4	94.7	94.9	95.0	95.0	95.0	95.0
≥ 500		51.2	57.6	67.3	79.4	83.0	86.8	91.9	93.2	95.3	95.7	95.9	96.0	96.0	96.0	96.0
≥ 400		51.2	57.6	67.3	79.4	83.0	86.8	91.9	93.4	95.9	96.3	96.6	97.1	97.3	97.3	97.3
≥ 300		51.2	57.6	67.3	79.4	83.0	86.8	91.9	93.5	96.5	97.4	97.9	98.6	98.9	98.9	98.9
≥ 200		51.2	57.6	67.3	79.4	83.0	86.8	91.9	93.5	96.5	97.4	97.9	98.6	98.9	98.9	98.9
≥ 100		51.2	57.6	67.3	79.4	83.0	86.8	91.9	93.5	96.5	97.4	97.9	98.6	98.9	98.9	98.9
≥ 0		51.2	57.6	67.3	79.4	83.0	86.8	91.9	93.5	96.5	97.4	97.9	98.6	98.9	98.9	98.9

TOTAL NUMBER OF OBSERVATIONS 805

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032 RHEIN-MAIN APT GERMANY/FRANKFURT (7-76)

FF
1500-1700

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY STATUTE MILES															
	≥10	≥6	≥5	≥4	≥3	≥2.5	≥2	≥1.5	≥1	≥0.5	≥0.25	≥0.15	≥0.1	≥0.05	≥0.025	≥0
NO CEILING		17.3	18.0	19.4	23.7	24.6	26.0	27.3	27.6	27.7	27.7	27.7	27.7	27.7	27.8	27.8
≥ 20000		23.0	24.7	26.5	32.1	33.1	35.4	37.1	37.6	37.7	37.9	37.9	37.9	37.9	38.1	38.1
≥ 18000		23.1	24.8	26.6	32.3	33.4	35.6	37.3	37.8	37.9	38.2	38.2	38.2	38.3	38.3	38.3
≥ 16000		23.1	24.8	26.6	32.3	33.4	35.6	37.3	37.8	37.9	38.2	38.2	38.2	38.3	38.3	38.3
≥ 14000		23.6	25.3	27.1	33.0	34.2	36.6	38.4	39.1	39.3	39.6	39.6	39.6	39.7	39.7	39.7
≥ 12000		25.5	27.3	29.3	36.1	37.5	39.8	41.9	42.5	42.8	43.0	43.0	43.0	43.1	43.1	43.1
≥ 10000		27.1	29.0	31.1	37.9	39.3	41.7	43.9	44.5	44.7	45.0	45.0	45.0	45.1	45.1	45.1
≥ 9000		27.7	29.8	32.0	38.9	40.4	42.8	45.1	45.7	46.0	46.2	46.2	46.2	46.4	46.4	46.4
≥ 8000		28.2	30.4	32.8	39.8	41.3	43.6	46.0	46.6	46.8	47.1	47.1	47.1	47.2	47.2	47.2
≥ 7000		29.4	30.7	33.0	40.2	41.7	44.0	46.4	47.0	47.2	47.5	47.5	47.5	47.6	47.6	47.6
≥ 6000		31.4	34.1	36.7	44.3	46.0	48.3	50.9	51.7	52.0	52.3	52.3	52.3	52.4	52.4	52.4
≥ 5000		34.0	36.8	39.7	48.1	49.8	52.2	54.9	55.7	56.1	56.4	56.4	56.4	56.5	56.5	56.5
≥ 4500		35.8	38.7	41.7	50.2	52.0	54.5	57.2	58.1	58.5	58.7	58.7	58.7	58.8	58.8	58.8
≥ 4000		40.7	43.5	46.6	55.6	57.6	60.2	63.3	64.3	64.8	65.0	65.0	65.0	65.1	65.1	65.1
≥ 3500		43.4	47.0	50.3	59.6	61.6	64.3	67.4	68.4	68.9	69.1	69.1	69.1	69.2	69.2	69.2
≥ 3000		46.6	50.8	54.6	64.2	66.3	69.2	72.8	73.8	74.3	74.5	74.5	74.5	74.7	74.7	74.7
≥ 2500		48.7	53.5	57.6	67.7	70.1	72.9	76.9	77.9	78.4	78.6	78.6	78.6	78.7	78.7	78.7
≥ 2000		51.3	56.4	61.1	72.2	74.7	77.8	82.1	83.1	83.7	83.9	83.9	83.9	84.1	84.1	84.1
≥ 1800		51.9	57.2	61.9	73.3	76.1	79.6	84.1	85.0	85.7	85.9	85.9	85.9	86.2	86.2	86.2
≥ 1500		52.7	58.2	63.5	75.0	78.0	82.1	87.4	88.4	89.1	89.4	89.4	89.4	89.6	89.6	89.6
≥ 1200		52.9	58.6	63.9	75.8	78.7	83.7	89.4	90.5	91.2	91.5	91.5	91.5	91.7	91.7	91.7
≥ 1000		52.9	58.6	63.9	76.0	79.1	84.1	90.1	91.3	92.3	92.6	92.6	92.6	92.8	92.8	92.8
≥ 900		52.9	58.6	63.9	76.0	79.1	84.1	90.1	91.8	92.8	93.1	93.1	93.1	93.4	93.4	93.4
≥ 800		53.0	58.7	64.0	76.1	79.2	84.2	90.9	92.1	93.2	93.4	93.4	93.4	93.8	93.8	93.8
≥ 700		53.0	58.7	64.0	76.1	79.5	84.5	91.5	92.8	93.9	94.2	94.3	94.3	94.9	94.9	94.9
≥ 600		53.0	58.7	64.0	76.1	79.5	84.7	91.7	93.1	94.2	94.4	94.4	94.4	95.2	95.2	95.2
≥ 500		53.0	58.7	64.0	76.3	79.6	84.8	92.1	93.4	94.8	95.1	95.2	95.2	96.0	96.0	96.0
≥ 400		53.0	58.7	64.0	76.3	79.6	84.8	92.1	93.4	95.2	95.4	95.7	95.7	96.5	96.5	96.5
≥ 300		53.0	58.7	64.0	76.3	79.6	84.8	92.2	93.6	96.0	96.8	97.4	97.4	98.5	98.5	98.5
≥ 200		53.0	58.7	64.0	76.3	79.6	84.8	92.2	93.6	96.0	96.8	97.4	97.4	98.9	98.9	98.9
≥ 100		53.0	58.7	64.0	76.3	79.6	84.8	92.2	93.6	96.0	96.8	97.4	97.4	99.0	99.0	99.0
≥ 0		53.0	58.7	64.0	76.3	79.6	84.8	92.2	93.6	96.0	96.8	97.4	97.4	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 809

2

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032

RHEIN-MAIN APT GERMANY/FRANKFURT

47-76

FF

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1900-2000

CEILING FEET	VISIBILITY STATUTE MILES															
	≥10	≥6	≥5	≥4	≥3	≥2.5	≥2	≥1.5	≥1.2	≥1	≥0.8	≥0.6	≥0.5	≥0.4	≥0.3	≥0
NO CEILING		20.9	22.0	25.7	30.9	32.5	33.1	33.9	34.1	34.2	34.2	34.2	34.2	34.2	34.2	34.4
≥ 20000		24.6	26.1	29.8	35.5	37.1	37.9	39.2	39.4	39.6	39.6	39.6	39.6	39.6	39.6	39.7
≥ 18000		24.6	26.1	29.8	35.5	37.1	37.9	39.2	39.4	39.6	39.6	39.6	39.6	39.6	39.6	39.7
≥ 16000		24.6	26.1	29.8	35.5	37.1	37.9	39.2	39.4	39.6	39.6	39.6	39.6	39.6	39.6	39.7
≥ 14000		25.0	26.6	30.5	36.3	38.1	38.9	40.3	40.5	40.7	40.7	40.7	40.7	40.7	40.7	40.8
≥ 12000		27.2	29.3	33.5	39.4	41.2	42.0	43.4	43.6	43.8	43.8	43.8	43.8	43.8	43.8	43.9
≥ 10000		28.6	31.0	35.2	41.5	43.4	44.3	45.6	45.9	46.0	46.0	46.0	46.0	46.0	46.0	46.1
≥ 9000		28.8	31.3	35.5	41.8	43.8	44.6	46.1	46.4	46.5	46.5	46.5	46.5	46.5	46.5	46.6
≥ 8000		29.0	31.5	35.7	42.5	44.5	45.4	46.8	47.1	47.2	47.2	47.2	47.2	47.2	47.2	47.3
≥ 7000		29.6	32.3	36.8	43.8	45.9	46.7	48.2	48.5	48.6	48.6	48.6	48.6	48.6	48.6	48.7
≥ 6000		31.0	33.5	38.4	45.5	47.6	48.5	49.9	50.2	50.3	50.3	50.3	50.3	50.3	50.3	50.4
≥ 5000		34.9	37.5	42.6	50.4	52.5	53.5	55.0	55.3	55.4	55.4	55.4	55.4	55.4	55.4	55.5
≥ 4500		38.1	41.0	46.2	54.6	57.1	58.2	59.7	60.0	60.1	60.1	60.1	60.1	60.1	60.1	60.2
≥ 4000		41.4	45.0	50.3	59.1	61.9	63.2	64.6	64.6	65.0	65.0	65.0	65.0	65.0	65.0	65.1
≥ 3500		44.1	48.0	53.6	62.7	65.5	66.7	68.2	68.5	68.6	68.6	68.6	68.6	68.6	68.6	68.7
≥ 3000		46.2	50.6	56.7	66.1	69.2	70.6	72.1	72.4	72.6	72.6	72.6	72.6	72.6	72.6	72.7
≥ 2500		48.9	53.9	60.6	71.1	74.3	75.9	77.4	77.8	77.9	77.9	77.9	77.9	77.9	77.9	78.0
≥ 2000		52.2	57.5	64.6	75.4	79.0	80.6	82.2	82.6	82.7	82.7	82.7	82.7	82.7	82.7	82.8
≥ 1800		53.7	58.7	65.9	76.9	80.6	82.2	83.8	84.2	84.3	84.3	84.3	84.3	84.3	84.3	84.4
≥ 1500		54.8	60.6	68.2	80.0	84.1	85.7	87.3	87.9	88.1	88.1	88.1	88.1	88.1	88.1	88.3
≥ 1200		55.4	61.2	69.1	81.6	86.2	88.5	90.7	91.3	91.6	91.6	91.6	91.7	91.7	91.7	91.8
≥ 1000		55.7	61.6	69.6	82.4	87.0	89.6	92.2	93.1	93.3	93.3	93.3	93.4	93.4	93.4	93.6
≥ 900		55.7	61.6	69.6	82.4	87.0	89.7	92.6	93.4	93.7	93.7	93.7	93.8	93.8	93.8	93.9
≥ 800		55.9	61.7	69.7	82.7	87.3	90.1	93.1	93.9	94.2	94.2	94.2	94.3	94.3	94.3	94.4
≥ 700		55.9	61.7	69.7	82.7	87.5	90.6	93.6	94.4	95.1	95.1	95.1	95.2	95.2	95.2	95.3
≥ 600		56.0	61.8	69.8	83.1	87.6	90.7	93.8	94.7	95.3	95.3	95.3	95.4	95.4	95.4	95.6
≥ 500		56.0	61.8	69.8	83.1	87.8	90.9	94.2	95.1	95.9	95.9	95.9	96.0	96.0	96.0	96.2
≥ 400		56.0	61.8	69.8	83.1	87.8	91.0	94.4	95.3	96.2	96.2	96.2	96.3	96.3	96.3	96.4
≥ 300		56.0	61.8	69.8	83.1	87.8	91.0	94.7	95.8	97.0	97.0	97.0	97.4	97.4	97.4	97.7
≥ 200		56.0	61.8	69.8	83.1	87.8	91.0	94.8	96.2	97.7	97.7	97.7	98.3	98.4	98.4	99.0
≥ 100		56.0	61.8	69.8	83.1	87.8	91.0	94.8	96.4	98.1	98.1	98.1	99.1	99.4	99.4	100.0
≥ 0		56.0	61.8	69.8	83.1	87.8	91.0	94.8	96.4	98.1	98.1	98.1	99.1	99.4	99.4	100.0

TOTAL NUMBER OF OBSERVATIONS

809

USAF ETAC

FORM
AFM 64

D-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

2

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATIONRHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME67-76
YEARSFE
FOOT

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

2100-2300
HOURS

CEILING (FEET)	VISIBILITY STATUTE MILES															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1	≥¾	≥½	≥¼	≥⅓	≥⅕	≥⅒	≥0
NO CEILING		22.9	24.1	28.0	33.7	34.6	35.3	36.6	37.2	37.3	37.3	37.5	37.5	37.5	37.5	37.7
≥ 20000		25.1	26.9	31.2	37.0	38.1	38.7	40.3	41.1	41.2	41.4	41.4	41.4	41.4	41.4	41.6
≥ 18000		25.1	26.9	31.2	37.0	38.1	38.7	40.3	41.1	41.2	41.4	41.4	41.4	41.4	41.4	41.6
≥ 16000		25.1	26.9	31.2	37.0	38.1	38.7	40.3	41.1	41.2	41.4	41.4	41.4	41.4	41.4	41.6
≥ 14000		25.6	27.4	31.7	37.5	38.6	39.2	40.8	41.6	41.7	41.9	41.9	41.9	41.9	41.9	42.1
≥ 12000		27.3	29.5	33.8	40.1	41.2	41.9	43.5	44.3	44.4	44.6	44.6	44.6	44.6	44.6	44.8
≥ 10000		28.0	30.6	35.5	42.6	43.8	44.4	46.0	46.9	47.0	47.1	47.1	47.1	47.1	47.1	47.4
≥ 9000		28.6	31.3	36.7	43.9	45.2	45.8	47.5	48.5	48.6	48.7	48.7	48.7	48.7	48.7	49.0
≥ 8000		28.9	31.7	37.3	44.7	45.9	46.5	48.3	49.3	49.4	49.6	49.6	49.6	49.6	49.6	49.8
≥ 7000		29.5	32.3	38.1	45.4	46.8	47.4	49.2	50.3	50.4	50.6	50.6	50.6	50.6	50.6	50.8
≥ 6000		31.0	34.0	39.9	47.2	48.7	49.3	51.2	52.3	52.4	52.5	52.5	52.5	52.5	52.5	52.8
≥ 5000		33.3	36.4	42.7	50.3	51.9	52.5	54.6	55.7	55.8	55.9	55.9	55.9	55.9	55.9	56.2
≥ 4500		36.8	40.1	46.8	55.1	56.7	57.3	59.4	60.5	60.6	60.7	60.7	60.7	60.7	60.7	61.0
≥ 4000		40.0	43.5	50.3	58.6	60.6	61.2	63.3	64.4	64.5	64.6	64.6	64.6	64.6	64.6	64.9
≥ 3500		42.8	46.3	53.7	62.3	64.4	65.0	67.1	68.2	68.3	68.4	68.4	68.4	68.4	68.4	68.7
≥ 3000		44.8	48.2	56.3	65.1	67.3	68.1	70.5	71.6	71.7	71.8	71.8	71.8	71.8	71.8	72.1
≥ 2500		47.0	50.4	58.6	68.7	71.5	72.2	74.7	75.8	75.9	76.0	76.0	76.1	76.1	76.1	76.4
≥ 2000		51.2	54.8	63.9	75.0	77.8	78.8	81.5	82.7	82.9	83.0	83.0	83.1	83.1	83.1	83.4
≥ 1800		52.3	55.9	65.2	77.1	80.2	81.3	84.2	85.3	85.6	85.7	85.7	85.8	85.8	85.8	86.0
≥ 1500		53.0	56.6	66.8	79.2	82.3	83.5	86.8	88.4	88.7	88.9	88.9	89.0	89.0	89.0	89.2
≥ 1200		53.7	57.3	68.1	81.8	84.9	86.4	90.0	91.6	91.9	92.0	92.0	92.2	92.2	92.2	92.4
≥ 1000		53.9	58.1	68.8	83.0	86.2	87.8	91.3	92.9	93.3	93.4	93.4	93.5	93.5	93.5	93.8
≥ 900		53.9	58.3	69.0	83.4	86.5	88.1	91.7	93.3	93.6	93.8	93.8	93.9	93.9	93.9	94.1
≥ 800		53.9	58.3	69.0	83.5	86.7	88.4	92.3	93.6	94.0	94.1	94.1	94.2	94.2	94.2	94.5
≥ 700		53.9	58.4	69.2	83.6	86.9	88.7	92.5	94.2	94.6	94.7	94.7	94.9	94.9	94.9	95.1
≥ 600		54.0	58.5	69.3	83.7	87.0	88.9	92.8	94.5	94.9	95.0	95.0	95.1	95.1	95.1	95.3
≥ 500		54.0	58.5	69.3	83.7	87.1	89.0	93.0	95.0	95.3	95.5	95.5	95.6	95.6	95.6	95.8
≥ 400		54.0	58.5	69.3	83.7	87.1	89.0	93.1	95.1	95.5	95.6	95.7	95.8	95.8	95.8	96.1
≥ 300		54.0	58.5	69.3	83.7	87.1	89.0	93.4	95.7	96.2	96.5	96.5	96.7	96.7	96.7	97.1
≥ 200		54.0	58.5	69.3	83.7	87.1	89.0	93.4	95.8	96.8	97.4	97.7	97.8	97.8	97.8	98.8
≥ 100		54.0	58.5	69.3	83.7	87.1	89.0	93.4	95.8	96.8	97.4	97.7	97.8	97.9	98.2	99.0
≥ 0		54.0	58.5	69.3	83.7	87.1	89.0	93.4	95.8	96.8	97.4	97.8	98.2	98.7	99.1	100.0

TOTAL NUMBER OF OBSERVATIONS

817

2

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032 RHEIN-MUN APT GERMANY/FRANKFURT 67-76

0000-0200
HOURS EST

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1	≥1	≥1	≥1	≥1	≥1	≥1	≥1
NO CEILING		25.3	28.5	32.9	37.5	38.4	33.7	39.1	39.4	30.6	19.6	39.6	39.6	39.7	29.7	19.7
≥ 23000		29.0	31.9	37.1	42.0	44.3	44.8	45.4	45.6	45.9	45.9	45.9	45.9	46.0	46.0	46.0
≥ 18000		29.0	31.9	37.1	42.0	44.3	44.8	45.4	45.6	45.9	45.9	45.9	45.9	46.0	46.0	46.0
≥ 16000		29.0	31.9	37.1	42.0	44.3	44.8	45.4	45.6	45.9	45.9	45.9	45.9	46.0	46.0	46.0
≥ 14000		29.2	32.2	37.4	42.8	44.6	45.0	45.6	45.9	46.1	46.1	46.1	46.1	46.2	46.2	46.2
≥ 12000		30.3	33.7	39.2	44.7	46.8	47.4	48.2	48.5	48.7	48.7	48.7	48.7	48.8	48.8	48.8
≥ 10000		32.2	35.5	41.4	46.9	49.1	49.8	50.6	50.8	51.1	51.1	51.1	51.1	51.2	51.2	51.2
≥ 9000		32.7	36.4	42.3	47.9	50.0	50.7	51.5	51.8	52.0	52.0	52.0	52.0	52.1	52.1	52.1
≥ 8000		33.3	37.1	43.0	48.6	50.7	51.4	52.2	52.5	52.7	52.7	52.7	52.7	52.8	52.8	52.8
≥ 7000		34.9	38.8	45.0	50.6	52.7	53.4	54.3	54.5	54.7	54.7	54.7	54.7	54.8	54.8	54.8
≥ 6000		37.5	41.6	48.5	54.6	56.7	57.6	58.4	58.6	58.9	58.9	58.9	58.9	59.0	59.0	59.0
≥ 5000		40.0	44.7	52.1	58.3	60.4	61.3	62.2	62.4	62.6	62.6	62.6	62.6	62.8	62.8	62.8
≥ 4500		43.8	48.5	56.6	62.8	65.0	66.1	66.9	67.1	67.4	67.4	67.4	67.4	67.5	67.5	67.5
≥ 4000		47.3	52.5	61.2	67.7	70.1	71.6	72.6	72.8	73.0	73.0	73.0	73.0	73.2	73.2	73.2
≥ 3500		50.5	56.4	65.4	72.1	74.5	76.2	77.3	77.5	77.8	77.8	77.8	77.8	77.9	77.9	77.9
≥ 3000		53.3	59.7	69.3	76.6	79.0	81.1	82.2	82.4	82.6	82.6	82.6	82.6	82.7	82.7	82.7
≥ 2500		55.3	61.7	71.5	79.1	81.6	83.7	84.9	85.1	85.3	85.3	85.3	85.3	85.5	85.5	85.5
≥ 2000		58.6	65.2	76.2	84.4	86.9	89.0	90.2	90.5	90.8	90.8	90.8	90.8	90.9	90.9	90.9
≥ 1600		59.5	66.1	77.3	85.8	88.3	90.4	91.7	92.0	92.2	92.2	92.2	92.2	92.3	92.3	92.3
≥ 1400		60.9	67.7	79.7	88.4	91.0	93.1	94.4	94.7	94.9	94.9	94.9	94.9	95.0	95.0	95.0
≥ 1200		61.5	68.7	80.9	90.1	92.8	95.0	96.3	96.6	96.8	96.8	96.8	96.8	96.9	96.9	96.9
≥ 1000		61.6	68.8	81.0	90.3	93.3	95.5	96.8	97.0	97.3	97.3	97.3	97.3	97.4	97.4	97.4
≥ 900		61.6	68.8	81.0	90.3	93.5	95.7	97.0	97.3	97.5	97.5	97.5	97.5	97.6	97.6	97.6
≥ 800		61.6	68.9	81.1	90.4	93.9	96.2	97.6	97.9	98.1	98.1	98.1	98.1	98.2	98.2	98.2
≥ 700		61.6	68.9	81.1	90.4	93.9	96.2	97.8	98.0	98.2	98.2	98.2	98.2	98.3	98.3	98.3
≥ 600		61.6	68.9	81.1	90.5	94.0	96.5	98.1	98.3	98.6	98.6	98.6	98.6	98.7	98.7	98.7
≥ 500		61.6	68.9	81.2	90.6	94.2	96.7	98.3	98.5	98.8	98.8	98.8	98.8	98.9	98.9	98.9
≥ 400		61.6	68.9	81.2	90.6	94.2	96.8	98.6	98.8	99.1	99.1	99.1	99.1	99.2	99.2	99.2
≥ 300		61.5	68.9	81.2	91.0	94.4	97.0	98.8	99.2	99.4	99.4	99.4	99.4	99.5	99.5	99.5
≥ 200		61.6	68.9	81.2	91.0	94.4	97.0	98.8	99.2	99.4	99.4	99.4	99.4	99.5	99.5	99.5
≥ 100		61.6	68.9	81.2	91.0	94.4	97.0	98.8	99.2	99.4	99.4	99.4	99.4	99.6	99.6	99.6
≥ 0		61.6	68.9	81.2	91.0	94.4	97.0	98.8	99.2	99.4	99.4	99.4	99.4	99.8	99.8	100.0

TOTAL NUMBER OF OBSERVATIONS 346

USAF ETAC 0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHEP SERVICE/MAC

CEILING VERSUS VISIBILITY

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 57-76

0300-0500
HOURS

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥9	≥8	≥7	≥6	≥5	≥4	≥3	≥2	≥1	≥1/2	≥1/4	≥1/8	≥1/16	≥1/32	≥0
NO CEILING		22.2	25.2	28.2	34.5	37.0	38.0	39.0	39.1	39.3	39.3	39.3	39.4	39.4	39.6	39.7
≥ 20000		24.0	27.8	31.5	38.6	41.5	42.7	43.8	43.9	44.2	44.2	44.2	44.3	44.3	44.4	44.5
IV 18000		24.0	27.0	31.5	38.6	41.5	42.7	43.8	43.9	44.2	44.2	44.2	44.3	44.3	44.4	44.5
IV 16000		24.1	27.9	31.7	38.8	41.6	42.8	43.9	44.0	44.3	44.3	44.3	44.4	44.4	44.5	44.6
IV 14000		24.5	28.3	32.1	39.2	42.1	43.2	44.4	44.5	44.7	44.7	44.7	44.8	44.8	45.0	45.1
IV 12000		25.7	29.6	33.7	40.8	43.8	45.0	46.1	46.2	46.4	46.4	46.4	46.6	46.6	46.7	46.8
IV 10000		27.5	31.5	36.0	43.2	46.3	47.7	49.1	49.2	49.4	49.4	49.4	49.5	49.5	49.7	49.8
IV 9000		28.4	32.6	37.3	44.5	47.6	49.1	50.5	50.6	50.8	50.8	50.8	50.9	50.9	51.0	51.1
IV 8000		29.2	33.5	38.2	45.9	49.0	50.5	51.8	51.9	52.2	52.2	52.2	52.3	52.3	52.4	52.5
IV 7000		30.4	34.6	39.6	47.4	50.6	52.1	53.6	53.7	53.9	53.9	53.9	54.0	54.0	54.1	54.2
IV 6000		33.0	37.4	42.3	50.8	54.1	55.6	57.1	57.3	57.6	57.6	57.6	57.7	57.7	57.8	57.9
IV 5000		35.8	40.3	45.5	54.4	57.8	59.4	61.0	61.2	61.5	61.5	61.5	61.6	61.6	61.7	61.8
IV 4500		38.2	42.7	48.1	57.0	60.4	62.0	63.6	63.9	64.1	64.1	64.1	64.2	64.2	64.3	64.4
IV 4000		40.6	45.8	51.6	61.1	64.6	66.3	68.0	68.2	68.5	68.5	68.5	68.6	68.6	68.7	68.8
IV 3500		43.0	48.5	55.2	65.0	68.6	70.3	72.0	72.2	72.5	72.5	72.5	72.6	72.6	72.7	72.8
IV 3000		45.3	51.3	58.5	67.7	72.5	74.4	76.3	76.5	76.7	76.7	76.7	76.8	76.8	76.9	77.1
IV 2500		47.5	53.4	62.0	72.4	76.5	78.8	80.7	81.0	81.2	81.2	81.2	81.3	81.3	81.4	81.5
IV 2000		49.8	56.2	66.1	76.9	81.2	83.7	85.9	86.1	86.4	86.4	86.4	86.5	86.5	86.6	86.7
IV 1800		51.3	57.9	68.0	79.2	83.5	86.0	88.2	88.4	88.6	88.6	88.6	88.8	88.8	88.9	89.0
IV 1500		53.4	60.1	70.4	82.3	86.9	89.6	91.7	92.0	92.2	92.2	92.2	92.3	92.3	92.4	92.5
IV 1200		54.2	61.5	72.6	84.9	89.6	92.2	94.4	94.8	95.1	95.1	95.1	95.2	95.2	95.3	95.4
IV 1000		54.2	61.6	73.1	85.4	90.5	93.1	95.6	95.9	96.1	96.1	96.1	96.2	96.2	96.3	96.4
IV 900		54.2	61.6	73.2	85.7	90.8	93.5	96.0	96.2	96.4	96.4	96.4	96.6	96.6	96.7	96.8
IV 800		54.2	61.6	73.2	85.9	91.1	93.9	96.6	96.8	97.0	97.0	97.0	97.1	97.1	97.2	97.4
IV 700		54.2	61.6	73.2	86.1	91.4	94.4	97.1	97.5	97.7	97.7	97.7	97.8	97.8	97.9	98.1
IV 600		54.2	61.6	73.2	86.2	91.5	94.7	97.5	97.8	98.2	98.2	98.2	98.3	98.3	98.4	98.5
IV 500		54.2	61.6	73.2	86.2	91.5	94.8	97.6	97.9	98.3	98.3	98.3	98.4	98.4	98.5	98.6
IV 400		54.2	61.6	73.2	86.5	92.0	95.4	98.5	99.0	99.3	99.3	99.3	99.4	99.4	99.5	99.7
IV 300		54.2	61.6	73.2	86.5	92.0	95.4	98.5	99.0	99.3	99.3	99.3	99.4	99.4	99.5	99.7
IV 200		54.2	61.6	73.2	86.5	92.0	95.4	98.5	99.0	99.3	99.3	99.3	99.4	99.4	99.5	99.7
IV 100		54.2	61.6	73.2	86.5	92.0	95.4	98.5	99.0	99.3	99.3	99.3	99.4	99.4	99.5	99.7
IV 0		54.2	61.6	73.2	86.5	92.0	95.4	98.5	99.0	99.3	99.3	99.3	99.4	99.4	99.5	100.0

TOTAL NUMBER OF OBSERVATIONS 872

2

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032

RHEIN-MAIN APT GERMANY/FRANKFURT

67-76

11A

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0600-2300
HOURS (LT)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥1/16	≥.	≥0
NO CEILING		13.4	16.0	19.1	25.3	28.0	29.5	37.7	33.5	34.0	34.1	34.3	34.3	34.3	34.3	34.4
≥ 20000		14.0	18.2	23.2	30.9	37.7	35.5	39.8	40.8	41.4	41.5	41.7	41.7	41.8	41.3	42.1
≥ 18000		14.6	18.2	23.3	31.0	33.9	35.7	39.9	40.9	41.5	41.6	41.8	41.8	42.0	42.0	42.2
≥ 16000		14.8	18.2	23.3	31.0	33.9	35.7	39.9	40.9	41.5	41.6	41.8	41.8	42.0	42.0	42.2
≥ 14000		14.8	18.4	23.6	31.6	34.5	36.3	40.6	41.6	42.2	42.3	42.5	42.5	42.5	42.6	42.9
≥ 12000		16.1	19.9	25.8	34.6	37.6	39.5	43.8	44.8	45.3	45.4	45.7	45.7	45.8	45.9	46.0
≥ 10000		17.8	21.7	28.0	37.9	41.1	43.2	48.3	49.3	49.8	49.9	50.2	50.2	50.3	50.3	50.5
≥ 9000		18.0	22.0	28.5	38.8	42.0	44.1	49.5	50.5	51.1	51.2	51.4	51.4	51.5	51.5	51.7
≥ 8000		18.7	22.7	29.1	39.6	42.7	44.9	50.3	51.3	51.9	52.0	52.2	52.2	52.3	52.3	52.5
≥ 7000		18.9	22.9	29.5	40.0	43.2	45.3	50.7	51.7	52.4	52.6	52.9	52.9	53.0	53.0	53.2
≥ 6000		20.2	24.6	31.5	42.2	45.3	47.6	53.0	54.0	54.8	55.0	55.2	55.2	55.3	55.3	55.6
≥ 5000		21.8	27.1	34.6	46.1	49.5	52.3	57.8	58.8	59.6	59.8	60.1	60.1	60.2	60.2	60.4
≥ 4500		23.6	29.1	37.0	49.0	52.4	55.2	60.7	62.0	62.8	63.0	63.2	63.2	63.3	63.3	63.6
≥ 4000		25.3	31.0	39.1	52.9	56.5	59.4	65.0	66.4	67.2	67.4	67.6	67.6	67.7	67.7	67.9
≥ 3500		27.1	33.0	41.4	55.8	59.8	62.9	68.8	70.0	70.8	71.0	71.2	71.2	71.3	71.3	71.5
≥ 3000		29.1	35.0	44.4	59.2	63.6	66.7	72.9	74.2	75.0	75.3	75.5	75.5	75.6	75.6	75.8
≥ 2500		30.6	36.8	46.7	62.2	66.9	70.1	76.9	78.5	79.3	79.6	79.9	79.9	80.0	80.0	80.2
≥ 2000		32.7	39.0	49.6	65.9	71.0	74.6	82.7	84.4	85.3	85.6	85.8	85.8	85.9	85.9	86.2
≥ 1800		34.1	40.5	51.2	67.7	72.9	76.6	84.8	86.6	87.6	88.0	88.2	88.2	88.3	88.3	88.5
≥ 1500		35.2	42.0	53.2	70.1	75.3	79.1	87.6	89.4	90.6	90.9	91.1	91.1	91.2	91.2	91.5
≥ 1200		36.0	42.9	54.2	71.4	76.6	80.5	89.4	91.3	92.7	93.1	93.4	93.4	93.5	93.5	93.7
≥ 1000		36.0	42.9	54.3	72.0	77.2	81.3	90.6	92.7	94.2	94.7	94.9	94.9	95.1	95.1	95.3
≥ 900		36.0	42.9	54.3	72.0	77.3	81.6	90.8	92.9	94.4	94.9	95.2	95.2	95.3	95.3	95.5
≥ 800		36.0	43.0	54.4	72.4	77.8	82.3	91.8	94.0	95.5	96.2	96.4	96.4	96.5	96.5	96.7
≥ 700		36.0	43.0	54.4	72.4	77.8	82.5	91.9	94.2	95.7	96.4	96.6	96.6	96.7	96.7	97.0
≥ 600		36.0	43.0	54.4	72.7	78.1	82.8	92.4	94.7	96.3	97.1	97.3	97.4	97.5	97.5	97.8
≥ 500		36.0	43.0	54.4	72.7	78.1	82.8	92.4	94.8	96.6	97.4	97.6	97.8	97.9	97.9	98.1
≥ 400		36.0	43.0	54.4	72.7	78.1	82.8	92.5	94.9	97.1	97.9	98.2	98.3	98.4	98.4	98.7
≥ 300		36.0	43.0	54.4	72.7	78.1	82.8	92.5	94.9	97.1	98.0	98.4	98.5	98.7	98.7	98.9
≥ 200		36.0	43.0	54.4	72.7	78.1	82.8	92.5	94.9	97.1	98.1	98.5	98.7	98.9	98.9	99.1
≥ 100		36.0	43.0	54.4	72.7	78.1	82.8	92.5	94.9	97.1	98.1	98.5	98.7	99.0	99.1	99.7
≥ 0		36.0	43.0	54.4	72.7	78.1	82.8	92.5	94.9	97.1	98.1	98.7	98.8	99.1	99.3	100.0

TOTAL NUMBER OF OBSERVATIONS

889

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 67-76

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

7900-100
HOURS

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ .	≥ 0
NO CEILING		19.4	22.3	26.4	32.8	34.3	35.7	36.8	36.9	37.0	37.0	37.0	37.0	37.0	37.0	37.0
≥ 20000		24.5	27.9	33.3	40.8	42.6	44.1	45.5	45.8	45.9	45.9	45.9	45.9	45.9	45.9	45.9
≥ 18000		24.5	28.1	32.9	41.3	43.1	44.6	46.1	46.3	46.4	46.4	46.4	46.4	46.4	46.4	46.4
≥ 16000		24.5	28.1	33.9	41.3	43.1	44.6	46.1	46.3	46.4	46.4	46.4	46.4	46.4	46.4	46.4
≥ 14000		24.8	28.7	34.4	42.1	43.9	45.4	46.9	47.1	47.2	47.2	47.2	47.2	47.2	47.2	47.2
≥ 12000		25.5	29.4	35.6	44.3	46.3	47.8	49.3	49.5	49.6	49.6	49.6	49.6	49.6	49.6	49.6
≥ 10000		27.1	31.1	38.1	47.3	49.6	51.2	52.7	52.9	53.0	53.0	53.0	53.0	53.0	53.0	53.0
≥ 9000		27.4	31.5	38.4	48.0	50.3	52.0	53.6	53.8	53.9	53.9	53.9	53.9	53.9	53.9	53.9
≥ 8000		27.9	31.9	39.0	48.6	50.8	52.5	54.1	54.4	54.5	54.5	54.5	54.5	54.5	54.5	54.5
≥ 7000		28.1	32.4	39.5	49.5	51.9	53.6	55.2	55.4	55.6	55.7	55.7	55.7	55.7	55.7	55.7
≥ 6000		28.9	33.4	40.7	50.8	53.3	55.0	56.7	57.0	57.3	57.4	57.4	57.4	57.4	57.4	57.4
≥ 5000		30.8	35.6	43.4	54.1	56.7	58.4	60.2	60.5	60.8	60.9	60.9	60.9	60.9	60.9	60.9
≥ 4500		32.0	36.9	45.3	56.3	58.9	60.8	62.6	62.9	63.2	63.3	63.3	63.3	63.3	63.3	63.3
≥ 4000		35.4	40.8	49.5	61.4	64.2	66.3	68.3	68.5	68.9	69.0	69.0	69.0	69.0	69.0	69.0
≥ 3500		37.6	43.4	52.3	65.2	68.1	70.1	72.1	72.4	72.7	72.8	72.8	72.8	72.8	72.8	72.8
≥ 3000		40.9	46.9	55.9	69.5	72.4	74.6	76.7	76.9	77.2	77.3	77.3	77.3	77.3	77.3	77.3
≥ 2500		44.6	51.0	60.6	75.3	78.3	80.9	83.1	83.4	83.8	83.9	83.9	83.9	83.9	83.9	83.9
≥ 2000		47.1	53.6	63.6	79.4	82.7	86.0	88.3	88.6	89.2	89.4	89.4	89.4	89.4	89.4	89.4
≥ 1800		47.8	54.2	64.3	80.3	83.7	87.0	89.4	89.6	90.3	90.4	90.4	90.4	90.4	90.4	90.4
≥ 1500		48.8	55.4	66.1	82.6	86.2	89.5	91.8	92.1	92.8	92.9	92.9	92.9	92.9	92.9	92.9
≥ 1200		48.9	55.6	66.4	83.0	86.9	90.3	92.9	93.1	94.1	94.3	94.3	94.3	94.3	94.3	94.3
≥ 1000		49.0	55.8	66.6	83.5	87.4	90.9	93.8	94.0	95.0	95.2	95.2	95.2	95.2	95.2	95.2
≥ 900		49.2	55.9	66.7	83.6	87.8	91.3	94.1	94.3	95.4	95.6	95.6	95.6	95.6	95.6	95.6
≥ 800		49.4	56.1	66.8	83.9	88.3	91.8	95.1	95.5	96.5	96.7	96.7	96.7	96.7	96.7	96.7
≥ 700		49.3	56.1	66.9	84.0	88.6	92.1	95.6	95.9	97.1	97.3	97.3	97.3	97.3	97.3	97.3
≥ 600		49.3	56.1	67.0	84.3	88.8	92.4	96.0	96.6	98.0	98.2	98.2	98.2	98.2	98.2	98.2
≥ 500		49.3	56.1	67.0	84.3	88.8	92.4	96.0	96.6	98.2	98.6	98.6	98.6	98.6	98.6	98.6
≥ 400		49.3	56.1	67.0	84.4	88.9	92.5	96.4	97.1	98.6	99.1	99.1	99.1	99.1	99.1	99.1
≥ 300		49.3	56.1	67.0	84.4	88.9	92.5	96.4	97.1	98.6	99.3	99.7	99.7	99.7	99.7	99.7
≥ 200		49.3	56.1	67.0	84.4	88.9	92.5	96.4	97.1	98.6	99.3	99.7	99.7	99.7	99.8	99.8
≥ 100		49.3	56.1	67.0	84.4	88.9	92.5	96.4	97.1	98.6	99.3	99.7	99.7	99.7	99.8	99.8
≥ 0		49.3	56.1	67.0	84.4	88.9	92.5	96.4	97.1	98.6	99.3	99.7	99.7	99.7	99.8	100.0

TOTAL NUMBER OF OBSERVATIONS 883

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRAIKFUPT
STATION NAME

07-76
YEAR

120.0-1400
HOURS 151

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

CEILING FEET:	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥5 16	≥ 4	≥0
NO CEILING		26.2	28.8	31.2	33.3	33.8	34.2	34.2	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3
≥ 20000		32.9	36.3	39.7	42.7	43.6	44.3	44.5	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6
IV 18000		32.9	36.4	40.0	42.9	43.8	44.5	44.7	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8
IV 16000		32.9	36.4	40.0	42.9	43.8	44.5	44.7	44.8	44.8	44.8	44.8	44.8	44.8	44.8	44.8
IV 14000		33.1	36.6	40.3	43.2	44.2	44.8	45.1	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2
IV 12000		35.4	39.0	42.8	45.9	47.1	47.8	48.0	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1
IV 10000		37.0	40.9	44.7	48.2	49.5	50.2	50.4	50.5	50.5	50.5	50.5	50.5	50.5	50.5	50.5
IV 9000		37.7	41.9	45.7	49.4	50.7	51.4	51.8	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9
IV 8000		37.9	42.2	46.1	49.9	51.3	52.0	52.3	52.4	52.4	52.4	52.4	52.4	52.4	52.4	52.4
IV 7000		38.3	42.9	46.9	50.7	52.1	52.8	53.1	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2
IV 6000		39.4	44.0	48.0	51.9	53.3	54.0	54.4	54.5	54.6	54.6	54.6	54.6	54.6	54.6	54.6
IV 5000		43.2	48.2	52.4	56.4	57.9	58.6	58.9	59.0	59.1	59.3	59.3	59.3	59.3	59.3	59.3
IV 4500		44.9	50.3	53.1	59.0	60.5	61.3	61.6	61.7	61.9	62.0	62.0	62.0	62.0	62.0	62.0
IV 4000		49.2	55.2	60.4	64.5	65.9	66.7	67.2	67.3	67.4	67.5	67.5	67.5	67.5	67.5	67.5
IV 3500		53.8	60.3	66.7	71.3	72.8	73.6	74.0	74.1	74.2	74.3	74.3	74.3	74.3	74.3	74.3
IV 3000		58.9	66.1	73.2	78.3	79.8	80.6	81.0	81.2	81.3	81.4	81.4	81.4	81.4	81.4	81.4
IV 2500		63.3	70.9	78.8	85.0	86.7	87.5	88.2	88.3	88.4	88.5	88.5	88.5	88.5	88.5	88.5
IV 2000		65.8	73.6	82.0	88.5	90.5	91.4	92.1	92.2	92.4	92.5	92.5	92.5	92.5	92.5	92.5
IV 1800		66.3	74.0	82.5	89.4	91.4	92.3	93.1	93.2	93.4	93.5	93.5	93.5	93.5	93.5	93.5
IV 1500		67.4	75.5	84.1	91.4	93.6	94.8	95.7	95.8	96.0	96.1	96.1	96.1	96.1	96.1	96.1
IV 1200		67.4	75.6	84.4	91.9	94.2	95.0	96.6	96.7	97.0	97.2	97.2	97.2	97.2	97.2	97.2
IV 1000		67.4	75.6	84.6	92.4	94.8	96.1	97.2	97.4	97.8	98.0	98.0	98.0	98.0	98.0	98.0
IV 900		67.4	75.7	84.7	92.5	94.9	96.3	97.4	97.6	98.1	98.2	98.2	98.2	98.2	98.2	98.2
IV 800		67.4	75.7	84.8	92.7	95.2	96.7	97.8	98.1	98.5	98.6	98.6	98.6	98.6	98.6	98.6
IV 700		67.4	75.7	84.9	92.8	95.6	97.0	98.5	98.9	99.2	99.3	99.3	99.3	99.3	99.3	99.3
IV 600		67.4	75.7	84.9	92.8	95.6	97.0	98.6	98.9	99.4	99.5	99.5	99.5	99.5	99.5	99.5
IV 500		67.4	75.7	84.9	93.0	95.7	97.2	98.8	99.0	99.5	99.7	99.7	99.7	99.7	99.7	99.7
IV 400		67.4	75.7	84.9	93.0	95.7	97.2	98.8	99.0	99.7	99.9	99.9	99.9	99.9	99.9	99.9
IV 300		67.4	75.7	84.9	93.0	95.7	97.2	98.8	99.0	99.7	99.9	99.9	99.9	99.9	99.9	99.9
IV 200		67.4	75.7	84.9	93.0	95.7	97.2	98.8	99.0	99.7	99.9	99.9	99.9	99.9	99.9	99.9
IV 100		67.4	75.7	84.9	93.0	95.7	97.2	98.8	99.0	99.7	99.9	99.9	99.9	99.9	99.9	99.9
IV 0		67.4	75.7	84.9	93.0	95.7	97.2	98.8	99.0	99.7	99.9	99.9	99.9	99.9	99.9	99.9

TOTAL NUMBER OF OBSERVATIONS 881

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 07-76

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1500-1700
HOURS (LST)

CEILING FEET	VISIBILITY - STATUTE MILES														
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥0	≥0
NO CEILING		31.6	33.3	34.2	35.5	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6
≥ 20000		42.1	44.4	46.2	48.6	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0
≥ 18000		42.6	44.9	46.6	49.0	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5
≥ 16000		42.6	44.9	46.6	49.0	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5
≥ 14000		43.7	46.0	47.8	50.4	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0
≥ 12000		45.5	48.0	49.7	52.7	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3
≥ 10000		48.2	50.7	52.5	55.8	56.4	56.4	56.4	56.5	56.5	56.5	56.5	56.5	56.5	56.5
≥ 9000		50.2	52.7	54.9	58.3	59.0	59.0	59.0	59.1	59.1	59.1	59.1	59.1	59.1	59.1
≥ 8000		50.4	53.0	55.2	58.7	59.4	59.4	59.4	59.5	59.5	59.5	59.5	59.5	59.5	59.5
≥ 7000		51.2	53.8	56.1	59.6	60.3	60.3	60.3	60.4	60.4	60.4	60.4	60.4	60.4	60.4
≥ 6000		54.0	56.9	59.2	62.9	63.6	63.6	63.6	63.8	63.8	63.8	63.8	63.8	63.8	63.8
≥ 5000		57.1	60.3	62.3	66.5	67.4	67.4	67.4	67.6	67.9	68.0	68.0	68.0	68.0	68.0
≥ 4500		58.3	61.8	64.3	68.3	69.2	69.2	69.2	69.5	69.7	69.8	69.8	69.8	69.8	69.8
≥ 4000		64.4	68.2	71.0	76.1	77.0	77.0	77.0	77.5	77.7	77.8	77.8	77.8	77.8	77.8
≥ 3500		66.9	71.1	74.1	79.8	80.7	80.7	80.7	81.2	81.4	81.5	81.5	81.5	81.5	81.5
≥ 3000		70.6	75.1	78.4	84.7	85.8	85.8	85.8	86.3	86.6	86.7	86.7	86.7	86.7	86.7
≥ 2500		72.6	77.4	81.3	88.3	89.4	89.7	89.9	90.4	90.7	90.8	90.8	90.8	90.8	90.8
≥ 2000		74.4	79.6	83.8	91.0	92.8	93.1	93.3	93.8	94.1	94.3	94.3	94.3	94.3	94.3
≥ 1800		74.7	80.1	84.4	91.7	93.5	93.8	94.0	94.5	94.8	94.9	94.9	94.9	94.9	94.9
≥ 1500		76.0	81.5	85.9	93.2	95.1	95.4	95.8	96.2	96.6	96.8	96.8	96.8	96.8	96.8
≥ 1200		76.2	82.0	86.5	94.0	95.9	96.2	96.6	97.0	97.4	97.6	97.6	97.6	97.6	97.6
≥ 1000		76.2	82.0	86.5	94.0	95.9	96.2	96.6	97.0	97.4	97.6	97.6	97.6	97.6	97.6
≥ 900		76.2	82.0	86.5	94.0	95.9	96.2	96.6	97.0	97.4	97.6	97.6	97.6	97.6	97.6
≥ 800		76.2	82.0	86.5	94.0	95.9	96.2	96.6	97.0	97.4	97.6	97.6	97.6	97.6	97.6
≥ 700		76.2	82.0	86.5	94.0	95.9	96.2	96.6	97.0	97.4	97.6	97.6	97.6	97.6	97.6
≥ 600		76.2	82.0	86.5	94.0	95.9	96.2	96.6	97.0	97.4	97.6	97.6	97.6	97.6	97.6
≥ 500		76.2	82.0	86.5	94.0	95.9	96.2	96.6	97.0	97.4	97.6	97.6	97.6	97.6	97.6
≥ 400		76.2	82.0	86.5	94.0	95.9	96.2	96.6	97.0	97.4	97.6	97.6	97.6	97.6	97.6
≥ 300		76.2	82.0	86.5	94.0	95.9	96.2	96.6	97.0	97.4	97.6	97.6	97.6	97.6	97.6
≥ 200		76.2	82.0	86.5	94.0	95.9	96.2	96.6	97.0	97.4	97.6	97.6	97.6	97.6	97.6
≥ 100		76.2	82.0	86.5	94.0	95.9	96.2	96.6	97.0	97.4	97.6	97.6	97.6	97.6	97.6
≥ 0		76.2	82.0	86.5	94.0	95.9	96.2	96.6	97.0	97.4	97.6	97.6	97.6	97.6	97.6

TOTAL NUMBER OF OBSERVATIONS 871

2

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATIONRHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME67-76
YEARS1A
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1600-2000
HOURS LST

CEILING (FEET)	VISIBILITY - STATUTE MILES															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥5/16	≥¼	≥0
NO CEILING		33.3	35.6	38.1	39.8	39.8	40.1	40.3	40.3	40.3	40.3	40.3	40.3	40.3	40.3	40.3
≥ 20000		39.7	42.5	45.8	48.5	49.0	49.3	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5
≥ 18000		39.3	42.7	46.1	48.7	49.2	49.5	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8
≥ 16000		39.3	42.7	46.1	48.7	49.2	49.5	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8
≥ 14000		40.6	43.6	47.0	49.7	50.1	50.5	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7	50.7
≥ 12000		41.9	44.9	48.5	51.4	51.8	52.2	52.4	52.4	52.4	52.4	52.4	52.4	52.4	52.4	52.4
≥ 10000		43.9	47.2	51.2	54.7	55.2	55.5	55.9	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0
≥ 9000		44.3	47.7	51.7	55.7	56.1	56.5	56.8	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9
≥ 8000		44.5	48.2	52.2	56.1	56.7	57.0	57.4	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5
≥ 7000		46.5	50.0	54.0	58.0	58.7	59.0	59.4	59.5	59.5	59.5	59.5	59.5	59.5	59.5	59.5
≥ 6000		50.1	54.0	58.3	62.6	63.4	63.7	64.1	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2
≥ 5000		53.8	58.1	62.4	67.2	68.0	68.4	68.9	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2
≥ 4500		55.9	60.3	64.7	69.9	70.8	71.1	71.7	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9
≥ 4000		59.6	64.3	69.1	74.9	75.9	76.2	76.8	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
≥ 3500		63.5	68.5	73.2	79.6	80.6	81.3	82.1	82.3	82.4	82.4	82.4	82.4	82.4	82.4	82.4
≥ 3000		66.9	72.6	78.3	84.9	85.9	86.7	87.5	88.0	88.1	88.1	88.1	88.1	88.1	88.1	88.1
≥ 2500		68.7	74.6	80.6	88.5	89.8	90.6	91.6	91.9	92.0	92.0	92.0	92.0	92.0	92.0	92.0
≥ 2000		70.0	75.9	82.3	90.9	92.3	93.1	94.2	94.6	94.7	94.7	94.7	94.7	94.7	94.7	94.7
≥ 1800		70.4	76.3	83.7	91.9	93.3	94.1	95.3	95.6	95.7	95.7	95.7	95.7	95.7	95.7	95.7
≥ 1500		71.4	77.4	85.0	93.3	94.7	95.5	96.8	97.1	97.2	97.2	97.2	97.2	97.2	97.2	97.2
≥ 1200		71.4	77.4	85.0	93.3	95.0	95.8	97.1	97.5	97.6	97.6	97.6	97.6	97.6	97.6	97.6
≥ 1000		71.4	77.5	85.1	94.1	95.7	96.8	98.3	98.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 900		71.4	77.5	85.1	94.1	95.7	96.8	98.3	98.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 800		71.4	77.5	85.2	94.2	96.0	97.1	98.6	99.0	99.1	99.1	99.1	99.1	99.1	99.1	99.1
≥ 700		71.4	77.5	85.2	94.2	96.0	97.1	98.6	99.0	99.1	99.1	99.1	99.1	99.1	99.1	99.1
≥ 600		71.4	77.5	85.2	94.2	96.0	97.1	98.7	99.1	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 500		71.4	77.5	85.2	94.2	96.0	97.1	98.7	99.1	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 400		71.4	77.5	85.2	94.3	96.2	97.5	99.1	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 300		71.4	77.5	85.2	94.3	96.2	97.6	99.2	99.5	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 200		71.4	77.5	85.2	94.3	96.2	97.6	99.2	99.5	99.9	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100		71.4	77.5	85.2	94.3	96.2	97.6	99.2	99.5	99.9	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0		71.4	77.5	85.2	94.3	96.2	97.6	99.2	99.5	99.9	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

866

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 67-76

1A

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

2100-2300

CEILING FEET	VISIBILITY - STATUTE MILES															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 5/16	≥ 1/8	≥ 0
NO CEILING		30.1	32.7	38.0	41.1	41.6	41.6	41.9	42.0	42.1	42.1	42.1	42.1	42.1	42.1	42.1
≥ 20000		32.7	35.6	41.7	45.3	46.6	46.6	46.8	47.0	47.1	47.1	47.1	47.1	47.1	47.1	47.1
IV 18000		32.9	35.8	42.0	45.5	46.8	46.8	47.1	47.2	47.3	47.3	47.3	47.3	47.3	47.3	47.3
IV 16000		32.9	35.8	42.0	45.5	46.8	46.8	47.1	47.2	47.3	47.3	47.3	47.3	47.3	47.3	47.3
IV 14000		33.8	36.6	42.8	46.4	47.7	47.7	47.9	48.0	48.2	48.2	48.2	48.2	48.2	48.2	48.2
IV 12000		34.5	37.3	43.9	47.4	48.8	48.8	49.0	49.1	49.2	49.2	49.2	49.2	49.2	49.2	49.2
IV 10000		36.7	39.7	46.6	50.2	51.6	51.8	52.2	52.3	52.4	52.4	52.4	52.4	52.4	52.4	52.4
IV 9000		37.6	40.5	47.4	51.0	52.4	52.7	53.0	53.2	53.3	53.3	53.3	53.3	53.3	53.3	53.3
IV 8000		37.9	41.0	47.9	51.5	52.9	53.2	53.6	53.7	53.9	53.9	53.9	53.9	53.9	53.9	53.9
IV 7000		40.5	43.9	50.8	54.3	55.8	56.0	56.5	56.6	56.7	56.7	56.7	56.7	56.7	56.7	56.7
IV 6000		43.8	47.3	54.2	58.3	59.8	60.0	60.5	60.6	60.8	60.8	60.8	60.8	60.8	60.8	60.8
IV 5000		47.9	52.3	59.6	63.7	65.3	65.5	66.0	66.1	66.2	66.2	66.2	66.2	66.2	66.2	66.2
IV 4500		50.3	54.8	62.8	67.3	68.8	69.1	69.6	69.7	69.8	69.8	69.8	69.8	69.8	69.8	69.8
IV 4000		55.1	59.8	68.3	73.2	74.8	75.4	75.9	76.0	76.1	76.1	76.1	76.1	76.1	76.1	76.1
IV 3500		58.0	63.0	71.9	77.3	78.8	79.4	79.9	80.0	80.1	80.3	80.3	80.3	80.3	80.3	80.3
IV 3000		60.5	66.0	75.6	81.9	83.5	84.3	84.9	85.0	85.1	85.1	85.1	85.1	85.1	85.1	85.1
IV 2500		63.4	69.1	79.5	86.4	88.2	89.1	89.5	89.7	89.8	89.9	89.9	89.9	89.9	89.9	89.9
IV 2000		65.3	71.1	81.8	89.1	90.8	91.7	92.2	92.3	92.4	92.5	92.5	92.5	92.5	92.5	92.5
IV 1800		66.5	72.4	83.4	91.0	92.7	93.6	94.1	94.2	94.3	94.4	94.4	94.5	94.5	94.5	94.5
IV 1500		67.5	73.7	84.8	92.5	94.4	95.2	95.7	95.8	96.0	96.1	96.1	96.2	96.2	96.2	96.2
IV 1200		67.8	74.0	85.4	93.3	95.4	96.7	97.1	97.3	97.4	97.5	97.5	97.6	97.6	97.6	97.6
IV 1000		67.8	74.0	85.4	93.3	95.5	97.0	97.6	97.7	97.9	98.0	98.0	98.1	98.1	98.1	98.1
IV 900		67.9	74.1	85.6	93.8	95.8	97.5	98.1	98.2	98.3	98.5	98.5	98.6	98.6	98.6	98.6
IV 800		67.9	74.1	85.6	93.9	96.1	97.7	98.3	98.5	98.6	98.7	98.7	98.9	98.9	98.9	98.9
IV 700		67.9	74.1	85.6	93.9	96.3	98.0	98.6	98.7	98.8	98.9	98.9	99.2	99.2	99.2	99.2
IV 600		67.9	74.1	85.6	93.9	96.3	98.0	98.7	98.8	98.9	99.0	99.0	99.3	99.3	99.3	99.3
IV 500		67.9	74.1	85.6	93.9	96.3	98.1	98.8	98.9	99.0	99.2	99.2	99.4	99.4	99.4	99.4
IV 400		67.9	74.1	85.6	93.9	96.4	98.2	98.9	99.0	99.2	99.3	99.3	99.5	99.5	99.5	99.5
IV 300		67.9	74.1	85.6	93.9	96.4	98.3	99.0	99.3	99.4	99.6	99.6	99.9	99.9	99.9	99.9
IV 200		67.9	74.1	85.6	93.9	96.4	98.3	99.0	99.3	99.5	99.8	99.8	100.0	100.0	100.0	100.0
IV 100		67.9	74.1	85.6	93.9	96.4	98.3	99.0	99.3	99.5	99.8	99.8	100.0	100.0	100.0	100.0
IV 0		67.9	74.1	85.6	93.9	96.4	98.3	99.0	99.3	99.5	99.8	99.8	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

841

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 07-70

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0000-1200
HOURS

CEILING FEET.	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/10	≥ .	≥ 0
NO CEILING		42.1	44.8	47.9	49.6	49.9	49.9	50.4	50.6	50.6	50.6	50.6	50.6	50.7	50.7	50.7
≥ 20000		43.7	48.6	52.5	54.7	55.0	55.0	55.5	55.8	55.8	55.8	55.8	55.8	55.9	55.9	55.9
≥ 15000		46.1	49.0	52.8	55.0	55.4	55.4	55.9	56.1	56.1	56.1	56.1	56.1	56.3	56.3	56.3
≥ 10000		46.2	49.1	52.9	55.2	55.5	55.5	56.0	56.3	56.3	56.3	56.3	56.3	56.4	56.4	56.4
≥ 14000		47.1	50.1	53.9	56.1	56.5	56.5	57.0	57.2	57.2	57.2	57.2	57.2	57.4	57.4	57.4
≥ 12000		49.5	52.8	56.8	59.1	59.5	59.5	60.0	60.2	60.2	60.2	60.2	60.2	60.3	60.4	60.4
≥ 10000		52.5	56.0	60.2	62.7	63.1	63.1	63.6	63.9	63.9	63.9	63.9	63.9	64.0	64.1	64.1
≥ 9000		53.4	57.0	61.3	63.8	64.4	64.4	64.9	65.1	65.1	65.1	65.1	65.1	65.2	65.4	65.4
≥ 8000		54.9	58.5	63.1	65.8	66.5	66.5	67.0	67.2	67.2	67.2	67.2	67.2	67.3	67.4	67.4
≥ 7000		58.6	62.4	67.2	69.9	70.5	70.5	71.0	71.3	71.3	71.3	71.3	71.3	71.4	71.5	71.5
≥ 6000		61.1	65.4	70.3	73.0	73.6	73.7	74.2	74.4	74.4	74.4	74.4	74.4	74.6	74.7	74.7
≥ 5000		63.9	68.2	73.1	75.8	76.4	76.5	77.0	77.3	77.3	77.3	77.3	77.3	77.4	77.5	77.5
≥ 4500		65.7	71.1	76.4	79.5	80.1	80.2	80.7	81.0	81.0	81.0	81.0	81.0	81.1	81.2	81.2
≥ 4000		69.9	74.4	79.7	82.9	83.5	83.7	84.2	84.4	84.4	84.4	84.4	84.4	84.5	84.6	84.6
≥ 3500		71.5	76.2	81.7	85.0	85.6	85.7	86.2	86.5	86.6	86.6	86.6	86.6	86.7	86.9	86.9
≥ 3000		73.7	79.1	85.0	88.7	89.3	89.4	89.9	90.2	90.3	90.3	90.3	90.3	90.4	90.5	90.5
≥ 2500		74.7	80.1	86.2	90.3	90.9	91.0	91.5	91.8	91.9	91.9	91.9	91.9	92.0	92.1	92.1
≥ 2000		76.8	82.3	88.9	93.1	93.7	93.9	94.3	94.6	94.7	94.7	94.7	94.7	94.8	95.0	95.0
≥ 1800		77.1	82.7	89.3	93.7	94.3	94.5	95.0	95.2	95.3	95.3	95.3	95.3	95.5	95.6	95.6
≥ 1500		77.9	83.4	90.2	94.8	95.5	95.6	96.2	96.4	96.6	96.6	96.6	96.6	96.7	96.8	96.8
≥ 1200		78.1	83.7	90.4	95.1	95.7	95.8	96.4	96.7	96.9	96.9	96.9	96.9	97.1	97.2	97.2
≥ 1000		78.3	83.8	90.5	95.3	95.9	96.1	96.7	96.9	97.2	97.2	97.2	97.2	97.3	97.4	97.4
≥ 900		78.3	83.9	90.7	95.6	96.2	96.3	96.9	97.2	97.4	97.4	97.4	97.4	97.5	97.7	97.7
≥ 800		78.3	84.0	90.8	96.1	96.8	96.9	97.5	97.8	98.2	98.2	98.2	98.2	98.3	98.4	98.4
≥ 700		78.3	84.0	90.8	96.2	97.1	97.2	97.8	98.0	98.4	98.4	98.4	98.4	98.5	98.6	98.6
≥ 600		78.3	84.0	90.8	96.2	97.2	97.3	97.9	98.3	98.6	98.6	98.6	98.6	98.8	98.9	98.9
≥ 500		78.3	84.0	90.8	96.4	97.4	97.5	98.3	98.6	99.0	99.0	99.0	99.0	99.1	99.3	99.3
≥ 400		78.3	84.0	90.8	96.4	97.4	97.5	98.3	98.6	99.0	99.0	99.0	99.0	99.1	99.3	99.3
≥ 300		78.3	84.0	90.8	96.4	97.4	97.5	98.6	98.8	99.1	99.1	99.1	99.1	99.3	99.4	99.5
≥ 200		78.3	84.0	90.8	96.4	97.4	97.5	98.6	99.0	99.4	99.4	99.4	99.4	99.5	99.6	99.6
≥ 100		78.3	84.0	90.8	96.4	97.4	97.5	98.6	99.0	99.4	99.4	99.4	99.4	99.5	99.6	99.6
≥ 0		78.3	84.0	90.8	96.4	97.4	97.5	98.6	99.0	99.4	99.4	99.4	99.4	99.5	99.6	100.0

TOTAL NUMBER OF OBSERVATIONS 814

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 07-76

10

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0300-0500

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2.5	≥ 2	≥ 1.5	≥ 1	≥ 0.5	≥ 0.25	≥ 0.15	≥ 0.1	≥ 0.05	≥ 0.025	≥ 0.01
NO CEILING		31.5	34.1	37.7	41.8	42.6	43.0	44.3	44.7	44.8	44.8	44.8	44.8	44.8	44.8	45.3
≥ 20000		34.4	37.1	41.2	46.1	47.2	47.7	49.6	49.9	50.1	50.1	50.1	50.1	50.1	50.2	50.5
≥ 18000		34.4	37.1	41.2	46.1	47.2	47.7	49.6	49.9	50.1	50.1	50.1	50.1	50.1	50.2	50.5
≥ 16000		34.4	37.1	41.2	46.1	47.2	47.7	49.6	49.9	50.1	50.1	50.1	50.1	50.1	50.2	50.5
≥ 14000		34.8	37.4	41.6	46.5	47.6	48.0	49.9	50.3	50.4	50.4	50.4	50.4	50.4	50.5	50.9
≥ 12000		37.2	39.8	44.2	49.5	50.8	51.3	53.3	53.6	53.8	53.8	53.8	53.8	53.8	53.9	54.2
≥ 10000		40.0	42.9	47.3	52.7	54.2	54.7	56.9	57.2	57.3	57.3	57.3	57.3	57.3	57.4	57.8
≥ 9000		41.4	44.3	48.9	54.2	55.8	56.3	58.4	58.8	58.9	58.9	58.9	58.9	58.9	59.0	59.4
≥ 8000		42.7	45.6	50.2	55.7	57.2	57.7	59.8	60.2	60.3	60.3	60.3	60.3	60.3	60.4	60.8
≥ 7000		44.8	47.8	52.7	58.4	60.0	60.4	62.6	62.9	63.1	63.2	63.2	63.2	63.2	63.3	63.6
≥ 6000		48.0	51.1	56.5	62.6	64.2	64.8	67.1	67.5	67.7	67.8	67.8	67.8	67.8	67.9	68.3
≥ 5000		50.5	53.8	59.6	66.0	67.8	68.4	70.8	71.2	71.4	71.5	71.5	71.5	71.5	71.6	72.0
≥ 4500		53.3	56.5	62.6	69.0	70.8	71.4	73.8	74.1	74.4	74.5	74.5	74.5	74.5	74.6	75.0
≥ 4000		56.1	59.7	66.0	72.6	74.4	75.0	77.5	77.9	78.2	78.3	78.3	78.3	78.3	78.4	78.8
≥ 3500		58.6	62.3	68.9	75.7	77.5	78.1	80.7	81.3	81.6	81.8	81.8	81.8	81.8	81.9	82.2
≥ 3000		61.0	64.8	71.9	78.9	80.7	81.3	84.3	84.9	85.3	85.5	85.5	85.5	85.5	85.6	85.9
≥ 2500		63.5	67.5	75.0	82.1	84.0	84.6	87.6	88.2	88.7	88.8	88.8	88.8	88.8	88.9	89.3
≥ 2000		65.6	69.6	77.7	85.3	87.4	88.1	91.2	91.8	92.3	92.4	92.4	92.4	92.4	92.5	92.8
≥ 1800		66.0	70.2	78.4	86.1	88.1	88.9	92.0	92.6	93.1	93.2	93.2	93.2	93.2	93.3	93.7
≥ 1500		66.7	70.9	79.3	87.7	89.9	90.8	93.9	94.5	95.0	95.1	95.1	95.1	95.1	95.2	95.6
≥ 1200		67.0	71.3	79.7	88.4	90.7	91.7	94.9	95.6	96.1	96.2	96.2	96.2	96.2	96.3	96.7
≥ 1000		67.0	71.3	79.9	88.8	91.2	92.1	95.4	96.1	96.5	96.7	96.7	96.7	96.7	96.8	97.1
≥ 900		67.0	71.3	79.9	89.0	91.4	92.4	95.6	96.3	96.8	96.9	96.9	96.9	96.9	97.0	97.4
≥ 800		67.0	71.3	80.0	89.2	91.7	92.6	95.9	96.7	97.1	97.3	97.3	97.3	97.3	97.4	97.7
≥ 700		67.0	71.3	80.0	89.2	91.7	92.6	95.9	96.7	97.1	97.3	97.3	97.3	97.3	97.4	97.7
≥ 600		67.0	71.3	80.1	89.4	91.9	92.8	96.2	96.9	97.4	97.5	97.5	97.5	97.6	97.7	98.1
≥ 500		67.0	71.3	80.2	89.5	92.1	93.2	96.7	97.4	97.9	98.0	98.1	98.1	98.1	98.2	98.6
≥ 400		67.0	71.3	80.2	89.6	92.1	93.2	96.8	97.5	98.1	98.2	98.3	98.3	98.3	98.5	98.9
≥ 300		67.0	71.3	80.2	89.6	92.1	93.3	97.0	97.9	98.5	98.6	98.7	98.7	98.7	98.8	99.3
≥ 200		67.0	71.3	80.2	89.6	92.1	93.3	97.0	97.9	98.5	98.6	98.7	98.7	98.7	98.8	99.4
≥ 100		67.0	71.3	80.2	89.6	92.1	93.3	97.1	98.0	98.6	98.7	98.8	98.8	98.8	99.0	99.5
≥ 0		67.0	71.3	80.2	89.6	92.1	93.3	97.1	98.0	98.6	98.7	98.8	98.8	98.8	99.0	100.0

TOTAL NUMBER OF OBSERVATIONS 839

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
EARS

AP.
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0600-0800
HOURS

CEILING FEET	VISIBILITY (STATUTE MILES)																
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	¾	¾	¾	¾	≥5/16	≥4	≥0
NO CEILING		22.7	24.7	30.8	37.1	38.7	39.9	41.4	41.7	42.3	42.5	42.5	42.7	42.7	42.7	42.7	42.7
≥ 20000		29.0	31.5	37.8	45.3	47.1	48.3	50.6	51.3	51.9	52.1	52.1	52.2	52.2	52.2	52.2	52.2
≥ 18000		29.0	31.5	37.8	45.3	47.1	48.3	50.6	51.3	51.9	52.1	52.1	52.2	52.2	52.2	52.2	52.2
≥ 16000		29.0	31.5	37.8	45.3	47.1	48.3	50.6	51.3	51.9	52.1	52.1	52.2	52.2	52.2	52.2	52.2
≥ 14000		29.4	31.9	38.5	46.2	47.9	49.1	51.4	52.1	52.7	52.9	52.9	53.0	53.0	53.0	53.0	53.0
≥ 12000		31.1	33.8	40.6	48.5	50.2	51.5	54.0	54.8	55.4	55.6	55.6	55.7	55.7	55.7	55.7	55.7
≥ 10000		33.7	36.7	43.8	52.1	54.1	55.6	58.0	58.9	59.6	59.8	59.8	59.9	59.9	59.9	59.9	59.9
≥ 9000		35.2	38.2	45.7	54.0	56.1	57.6	60.0	60.8	61.5	61.8	61.8	61.9	61.9	61.9	61.9	61.9
≥ 8000		36.0	39.2	46.7	55.2	57.3	58.9	61.3	62.1	62.8	63.1	63.1	63.2	63.2	63.2	63.2	63.2
≥ 7000		36.9	40.2	47.8	56.9	59.0	60.6	63.1	63.9	64.6	64.8	64.8	64.9	64.9	64.9	64.9	64.9
≥ 6000		40.4	43.9	51.6	61.1	63.4	65.0	67.6	68.4	69.2	69.5	69.5	69.6	69.7	69.7	69.7	69.7
≥ 5000		42.4	46.2	54.0	63.8	66.3	68.2	71.1	71.9	72.7	73.0	73.0	73.1	73.2	73.2	73.2	73.2
≥ 4500		43.9	47.7	55.5	65.3	67.8	69.7	72.6	73.4	74.2	74.5	74.5	74.6	74.7	74.7	74.7	74.7
≥ 4000		47.0	51.0	59.1	69.0	71.7	73.5	76.9	77.9	78.7	79.0	79.0	79.1	79.3	79.3	79.3	79.3
≥ 3500		48.6	52.7	61.0	71.0	73.8	75.6	79.0	80.0	80.8	81.1	81.1	81.2	81.4	81.4	81.4	81.4
≥ 3000		50.6	54.8	63.4	73.2	77.4	79.4	82.8	83.7	84.7	85.1	85.1	85.2	85.3	85.3	85.3	85.3
≥ 2500		53.0	57.3	66.4	76.4	80.5	82.5	85.9	86.8	87.9	88.2	88.2	88.3	88.5	88.5	88.5	88.5
≥ 2000		55.5	59.9	69.1	80.7	83.9	85.9	89.7	90.7	91.8	92.2	92.2	92.3	92.4	92.4	92.4	92.4
≥ 1800		56.2	60.6	69.9	81.6	85.0	87.1	91.0	92.0	93.1	93.5	93.5	93.6	93.7	93.7	93.7	93.7
≥ 1500		56.6	61.1	70.4	82.3	85.9	88.2	92.2	93.2	94.5	94.9	94.9	95.0	95.1	95.1	95.1	95.1
≥ 1200		56.6	61.1	70.6	82.8	86.4	88.7	93.1	94.2	95.6	95.9	95.9	96.0	96.2	96.2	96.2	96.2
≥ 1000		56.8	61.3	70.9	83.0	86.7	89.0	93.5	94.5	96.0	96.4	96.4	96.5	96.6	96.6	96.6	96.6
≥ 900		56.9	61.4	71.0	83.1	86.8	89.2	93.6	94.6	96.2	96.5	96.5	96.6	96.7	96.7	96.7	96.7
≥ 800		56.9	61.4	71.1	83.2	86.9	89.3	93.8	95.0	96.5	96.9	96.9	97.0	97.1	97.1	97.1	97.1
≥ 700		56.9	61.4	71.1	83.2	86.9	89.4	93.9	95.1	96.7	97.1	97.1	97.2	97.3	97.3	97.3	97.3
≥ 600		56.9	61.4	71.1	83.4	87.3	89.7	94.6	95.8	97.6	97.9	97.9	98.0	98.1	98.1	98.1	98.1
≥ 500		56.9	61.4	71.1	83.4	87.3	89.7	95.0	96.2	98.0	98.5	98.6	98.7	98.8	98.8	98.8	98.8
≥ 400		56.9	61.4	71.1	83.4	87.3	89.7	95.0	96.2	98.4	99.0	99.1	99.2	99.3	99.3	99.3	99.3
≥ 300		56.9	61.4	71.1	83.4	87.3	89.9	95.1	96.3	98.7	99.3	99.4	99.5	99.7	99.7	99.7	99.7
≥ 200		56.9	61.4	71.1	83.4	87.3	89.9	95.1	96.3	98.8	99.4	99.5	99.7	99.9	99.9	99.9	99.9
≥ 100		56.9	61.4	71.1	83.4	87.3	89.9	95.1	96.3	98.8	99.4	99.5	99.7	99.9	99.9	99.9	99.9
≥ 0		56.9	61.4	71.1	83.4	87.3	89.9	95.1	96.3	98.8	99.4	99.5	99.7	99.9	99.9	99.9	100.0

TOTAL NUMBER OF OBSERVATIONS 856

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032 STATION RHEIN-MAIN APT GERMANY/FRAANKFURT 07-70

AD

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0900-1100

CEILING (FEET)	VISIBILITY - STATUTE MILES															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2.5	≥ 2	≥ 1.5	≥ 1	≥ .5	≥ .3	≥ .1	≥ .05	≥ .01	≥ .005	≥ 0
NO CEILING		34.1	36.7	40.4	43.3	43.4	43.6	43.8	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9
≥ 20000		40.3	43.5	48.1	51.7	51.9	52.6	53.1	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2
≥ 18000		40.4	43.7	48.2	51.8	52.0	52.7	53.2	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3
≥ 16000		40.4	43.7	48.2	51.8	52.0	52.7	53.2	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3
≥ 14000		41.2	44.3	49.0	52.6	52.9	53.6	54.0	54.1	54.1	54.1	54.1	54.1	54.1	54.1	54.1
≥ 12000		42.3	46.0	50.5	54.2	54.5	55.2	55.8	55.9	55.9	55.9	55.9	55.9	55.9	55.9	55.9
≥ 10000		45.1	49.1	54.0	57.9	58.1	58.8	59.4	59.5	59.5	59.5	59.5	59.5	59.5	59.5	59.5
≥ 9000		46.3	50.6	55.5	59.4	59.7	60.5	61.1	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2
≥ 8000		46.6	51.0	55.9	60.0	60.4	61.4	61.9	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0
≥ 7000		46.9	51.3	56.2	60.4	60.9	61.8	62.4	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5
≥ 6000		48.3	52.9	57.9	62.2	62.6	63.6	64.1	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3
≥ 5000		51.0	55.6	61.2	65.9	66.4	67.6	68.2	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3
≥ 4500		52.0	56.7	62.3	66.9	67.4	68.7	69.3	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4
≥ 4000		55.1	59.8	65.8	70.5	71.0	72.4	73.0	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1
≥ 3500		57.7	62.5	68.9	74.0	74.6	76.0	76.6	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
≥ 3000		61.9	66.5	72.5	78.6	79.3	80.7	81.3	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4
≥ 2500		67.3	72.3	79.3	84.5	85.2	86.7	87.3	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4
≥ 2000		71.0	76.1	83.5	88.9	89.6	91.2	91.7	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
≥ 1800		71.4	76.7	84.2	89.6	90.3	91.9	92.4	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7
≥ 1500		73.0	78.6	86.3	92.2	92.9	94.5	95.2	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
≥ 1200		73.3	79.0	87.0	93.4	94.1	95.7	96.4	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6
≥ 1000		73.5	79.2	87.2	94.1	94.8	96.5	97.2	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 900		73.5	79.2	87.2	94.1	94.8	96.5	97.2	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8
≥ 800		73.5	79.3	87.3	94.3	95.3	97.3	98.1	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4
≥ 700		73.5	79.3	87.4	94.9	95.7	97.6	98.6	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
≥ 600		73.5	79.3	87.4	95.0	96.2	98.5	99.3	99.5	99.5	99.7	99.7	99.7	99.7	99.7	99.7
≥ 500		73.5	79.3	87.4	95.0	96.2	98.5	99.4	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9
≥ 400		73.5	79.3	87.4	95.0	96.2	98.5	99.4	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300		73.5	79.3	87.4	95.0	96.2	98.5	99.4	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200		73.5	79.3	87.4	95.0	96.2	98.5	99.4	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100		73.5	79.3	87.4	95.0	96.2	98.5	99.4	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0		73.5	79.3	87.4	95.0	96.2	98.5	99.4	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 859

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032

RHEIN-MAIN APT GERMANY/FRANKFURT

67-70

AP

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

1200-2400

CEILING FEET	VISIBILITY - STATUTE MILES															
	≥10	≥6	≥5	≥4	≥3	≥2	≥1	≥1/2	≥1/4	≥1/8	≥1/16	≥1/32	≥1/64	≥1/128	≥1/256	≥0
NO CEILING		41.3	42.2	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3
≥ 20000		50.1	51.9	53.6	54.1	54.1	54.1	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2
IV 18000		50.1	51.9	53.6	54.1	54.1	54.1	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2
IV 16000		50.1	51.9	53.6	54.1	54.1	54.1	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2
IV 14000		51.0	52.7	54.4	54.9	54.9	54.9	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
IV 12000		52.4	54.2	56.0	56.4	56.4	56.4	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7
IV 10000		54.5	56.3	58.1	58.7	58.7	58.7	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9
IV 9000		56.0	58.0	60.0	60.7	60.7	60.7	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0
IV 8000		56.8	58.9	61.0	61.7	61.7	61.7	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9
IV 7000		57.9	60.1	62.2	63.0	63.1	63.1	63.4	63.4	63.4	63.4	63.4	63.4	63.4	63.4	63.4
IV 6000		59.5	61.8	63.8	64.7	64.8	64.8	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
IV 5000		62.2	64.6	66.7	67.7	67.8	67.8	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0
IV 4500		65.3	67.7	69.8	70.8	70.9	70.9	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1	71.1
IV 4000		69.8	72.2	74.3	75.3	75.4	75.4	75.7	75.7	75.7	75.7	75.7	75.7	75.7	75.7	75.7
IV 3500		73.2	75.5	77.8	78.8	78.9	78.9	79.1	79.1	79.1	79.1	79.1	79.1	79.1	79.1	79.1
IV 3000		79.7	82.3	85.1	86.2	86.3	86.3	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8
IV 2500		84.1	87.1	90.1	91.3	91.4	91.4	91.9	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
IV 2000		87.4	90.6	93.9	95.2	95.3	95.3	95.9	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
IV 1800		87.9	91.3	94.6	95.9	96.1	96.2	96.7	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
IV 1500		88.9	92.3	95.8	97.3	97.5	97.6	98.2	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3
IV 1200		89.1	92.7	96.2	97.6	97.9	98.0	98.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
IV 1000		89.1	92.7	96.3	97.7	98.0	98.1	98.7	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
IV 900		89.1	92.7	96.3	97.9	98.2	98.3	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
IV 800		89.1	92.7	96.3	98.0	98.3	98.4	99.0	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
IV 700		89.1	92.7	96.4	98.2	98.6	98.7	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
IV 600		89.3	92.8	96.5	98.3	98.7	98.9	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 500		89.3	92.8	96.5	98.3	98.7	99.0	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 400		89.3	92.8	96.5	98.3	98.7	99.0	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 300		89.3	92.8	96.5	98.3	98.7	99.0	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 200		89.3	92.8	96.5	98.3	98.7	99.0	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 100		89.3	92.8	96.5	98.3	98.7	99.0	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 0		89.3	92.8	96.5	98.3	98.7	99.0	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

836

2

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032

RHEIN-MAIN APT GERMANY/FRANKFURT

c7-70

AP

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1500-1700

CEILING (FEET)	VISIBILITY STATUTE MILES															
	≥10	≥6	≥5	≥4	≥3	≥2.5	≥2	≥1.5	≥1.4	≥1	≥.9	≥.8	≥.7	≥.6	≥.5	≥.4
NO CEILING		42.0	42.5	42.9	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1
≥ 20000		54.7	55.6	56.3	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.6
≥ 18000		55.6	56.4	57.1	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5
≥ 16000		55.6	56.4	57.1	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5
≥ 14000		56.8	57.7	58.6	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1
≥ 12000		58.8	59.8	60.6	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1
≥ 10000		61.8	62.8	63.6	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
≥ 9000		64.2	65.2	66.1	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0
≥ 8000		65.0	66.1	66.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9
≥ 7000		66.8	67.9	68.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7
≥ 6000		69.2	70.5	71.6	72.6	72.6	72.6	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8
≥ 5000		72.7	73.9	75.4	76.5	76.5	76.5	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6
≥ 4500		75.6	76.9	78.6	79.6	79.6	79.6	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8
≥ 4000		79.8	81.2	83.1	84.3	84.3	84.3	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5
≥ 3500		82.1	83.8	85.7	87.1	87.1	87.1	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3
≥ 3000		85.0	87.0	89.1	90.5	90.6	90.6	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8
≥ 2500		87.9	90.2	92.5	94.0	94.1	94.1	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3
≥ 2000		89.0	91.4	94.1	95.7	95.8	95.8	96.1	96.1	96.3	96.3	96.3	96.3	96.3	96.3	96.3
≥ 1800		89.6	92.0	94.7	96.3	96.6	96.6	97.0	97.0	97.1	97.1	97.1	97.1	97.1	97.1	97.1
≥ 1500		90.1	92.6	95.4	97.3	97.7	97.7	98.1	98.1	98.2	98.2	98.2	98.2	98.2	98.2	98.2
≥ 1200		90.5	93.0	95.8	97.9	98.3	98.3	98.7	98.7	98.9	98.9	98.9	98.9	98.9	98.9	98.9
≥ 1000		90.6	93.1	95.9	98.1	98.7	98.7	99.0	99.0	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 900		90.6	93.1	95.9	98.1	98.7	98.7	99.0	99.0	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 800		90.6	93.1	95.9	98.1	98.7	98.7	99.0	99.0	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 700		90.6	93.1	95.9	98.1	98.7	98.7	99.0	99.0	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 600		90.6	93.1	95.9	98.1	98.7	98.7	99.0	99.0	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 500		90.6	93.1	95.9	98.1	98.7	98.7	99.0	99.0	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 400		90.6	93.1	95.9	98.1	98.7	98.7	99.0	99.0	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 300		90.6	93.1	95.9	98.1	98.7	98.7	99.0	99.0	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 200		90.6	93.1	95.9	98.1	98.7	98.7	99.0	99.0	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 100		90.6	93.1	95.9	98.1	98.7	98.7	99.0	99.0	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 0		90.6	93.1	95.9	98.1	98.7	98.7	99.0	99.0	99.2	99.2	99.2	99.2	99.2	99.2	99.2

TOTAL NUMBER OF OBSERVATIONS

828

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEAR

APR
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1800-2000
HOURS (LT)

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ 1/8	≥ 0
NO CEILING		42.5	43.2	44.2	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4
≥ 70000		53.7	54.9	56.4	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9
≥ 18000		54.0	55.2	56.7	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1
≥ 16000		54.0	55.2	56.7	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1
≥ 14000		55.1	56.3	57.8	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4
≥ 12000		57.8	59.0	60.4	61.1	61.1	61.1	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2
≥ 10000		60.8	62.1	63.9	64.8	64.8	64.8	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
≥ 9000		62.0	63.4	65.1	66.1	66.1	66.1	66.2	66.2	66.2	66.2	66.2	66.2	66.2	66.2	66.2
≥ 8000		63.0	64.3	66.2	67.2	67.2	67.2	67.3	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4
≥ 7000		65.1	66.4	68.5	69.5	69.5	69.5	69.6	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7
≥ 6000		67.6	69.2	71.4	72.4	72.4	72.4	72.5	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6
≥ 5000		70.9	72.5	74.7	76.1	76.1	76.1	76.2	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3
≥ 4500		74.1	75.8	78.1	79.5	79.5	79.5	79.6	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7
≥ 4000		79.2	81.2	83.8	85.3	85.5	85.6	86.0	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1
≥ 3500		81.6	83.6	86.6	88.5	88.6	88.8	89.1	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3
≥ 3000		83.6	86.0	89.3	91.2	91.3	91.5	91.8	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9
≥ 2500		85.6	87.9	91.3	93.5	93.7	93.8	94.1	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3
≥ 2000		86.8	89.3	92.7	95.4	95.8	96.1	96.5	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6
≥ 1800		86.9	89.5	93.2	95.8	96.5	96.7	97.1	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
≥ 1500		87.8	90.6	94.3	97.3	97.9	98.3	98.7	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
≥ 1200		87.8	90.6	94.3	97.3	97.9	98.3	98.7	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
≥ 1000		87.9	90.7	94.4	97.6	98.3	98.7	99.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 900		87.9	90.7	94.4	97.6	98.3	98.7	99.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 800		87.9	90.7	94.4	97.7	98.4	98.8	99.3	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 700		87.9	90.7	94.4	97.7	98.4	98.8	99.3	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 600		87.9	90.7	94.4	97.7	98.4	98.8	99.3	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 500		87.9	90.7	94.4	97.7	98.4	98.8	99.3	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 400		87.9	90.7	94.4	97.7	98.4	98.8	99.3	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 300		87.9	90.7	94.4	97.7	98.4	98.8	99.4	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 200		87.9	90.7	94.4	97.7	98.4	98.8	99.4	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 100		87.9	90.7	94.4	97.7	98.4	98.8	99.4	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 0		87.9	90.7	94.4	97.7	98.4	98.8	99.5	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

819

2

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032

RHEIN-MAIN APT GERMANY/FRANKFURT

67-70

AP

STATION

STATION NAME

YEARS

MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

2100-2300

HOURS 151

CEILING (FEET)	VISIBILITY STATUTE MILES															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ .	≥ 0
NO CEILING		48.4	49.0	49.9	50.4	50.5	50.6	50.7	50.7	50.9	50.9	50.9	50.9	50.9	50.9	51.0
≥ 20000		56.1	56.8	58.1	58.7	58.9	59.2	59.3	59.3	59.4	59.4	59.4	59.4	59.4	59.4	59.5
≥ 18000		56.1	56.8	58.1	58.7	58.9	59.2	59.3	59.3	59.4	59.4	59.4	59.4	59.4	59.4	59.5
≥ 16000		56.1	56.8	58.1	58.7	58.9	59.2	59.3	59.3	59.4	59.4	59.4	59.4	59.4	59.4	59.5
≥ 14000		57.0	57.7	59.0	59.7	59.9	60.1	60.3	60.3	60.4	60.4	60.4	60.4	60.4	60.4	60.5
≥ 12000		59.2	60.0	61.6	62.2	62.5	62.7	62.8	62.8	63.0	63.0	63.0	63.0	63.0	63.0	63.1
IV 10000		62.0	63.6	65.3	66.0	66.3	66.5	66.6	66.6	66.7	66.7	66.7	66.7	66.7	66.7	66.9
IV 9000		63.3	65.0	66.7	67.5	67.7	68.0	68.1	68.1	68.2	68.2	68.2	68.2	68.2	68.2	68.3
IV 8000		64.7	66.4	68.2	68.9	69.2	69.4	69.6	69.6	69.7	69.7	69.7	69.7	69.7	69.7	69.8
IV 7000		66.9	68.6	70.7	71.5	71.8	72.0	72.1	72.1	72.2	72.2	72.2	72.2	72.2	72.2	72.4
IV 6000		71.4	73.1	75.4	76.3	76.5	76.8	76.9	76.9	77.0	77.0	77.0	77.0	77.0	77.0	77.1
IV 5000		74.4	76.5	78.9	80.1	80.3	80.6	80.7	80.7	80.8	80.8	80.8	80.8	80.8	80.8	80.9
IV 4500		76.8	79.0	81.4	82.8	83.0	83.3	83.4	83.4	83.5	83.5	83.5	83.5	83.5	83.5	83.6
IV 4000		80.4	82.8	85.2	86.8	87.2	87.4	87.5	87.5	87.7	87.7	87.7	87.7	87.7	87.7	87.8
IV 3500		82.2	84.5	87.0	88.9	89.2	89.5	89.6	89.6	89.7	89.7	89.7	89.7	89.7	89.7	89.9
IV 3000		84.6	87.0	89.6	91.4	91.9	92.2	92.3	92.3	92.4	92.4	92.4	92.4	92.4	92.4	92.5
IV 2500		85.8	88.4	91.2	93.0	93.5	93.8	93.9	93.9	94.0	94.0	94.0	94.0	94.0	94.0	94.1
IV 2000		87.0	89.9	93.4	95.5	96.1	96.3	96.5	96.5	96.6	96.6	96.6	96.6	96.6	96.6	96.7
IV 1800		87.4	90.2	93.9	96.1	96.7	96.9	97.1	97.1	97.2	97.2	97.2	97.2	97.2	97.2	97.3
IV 1500		87.9	90.7	94.4	96.6	97.2	97.4	97.6	97.6	97.7	97.7	97.7	97.7	97.7	97.7	97.8
IV 1200		87.9	90.8	94.6	96.9	97.8	98.0	98.2	98.2	98.3	98.3	98.3	98.3	98.3	98.3	98.4
IV 1000		87.9	90.8	94.6	97.3	98.3	98.5	98.8	98.8	98.9	98.9	98.9	98.9	98.9	98.9	99.0
IV 900		87.9	90.8	94.6	97.3	98.3	98.5	98.8	98.8	98.9	98.9	98.9	98.9	98.9	98.9	99.0
IV 800		87.9	90.8	94.6	97.4	98.4	98.7	98.9	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.1
IV 700		87.9	90.8	94.6	97.4	98.4	98.7	99.0	99.0	99.1	99.1	99.1	99.1	99.1	99.1	99.3
IV 600		87.9	90.8	94.6	97.4	98.4	98.7	99.0	99.0	99.1	99.1	99.1	99.1	99.1	99.1	99.3
IV 500		87.9	90.8	94.6	97.4	98.4	98.7	99.0	99.0	99.1	99.1	99.1	99.1	99.1	99.1	99.3
IV 400		87.9	90.8	94.6	97.4	98.4	98.7	99.1	99.1	99.3	99.3	99.3	99.3	99.3	99.3	99.4
IV 300		87.9	90.8	94.6	97.4	98.4	98.7	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.8
IV 200		87.9	90.8	94.6	97.4	98.4	98.7	99.6	99.6	99.8	99.8	99.8	99.8	99.8	99.9	100.0
IV 100		87.9	90.8	94.6	97.4	98.4	98.7	99.6	99.6	99.8	99.8	99.8	99.8	99.8	99.9	100.0
IV 0		87.9	90.8	94.6	97.4	98.4	98.7	99.6	99.6	99.8	99.8	99.8	99.8	99.8	99.9	100.0

TOTAL NUMBER OF OBSERVATIONS 818

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

14
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0000-0200
HOURS U.S.T.

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥¾	≥½	≥¼	≥16	≥0
NO CEILING		40.7	42.7	45.8	47.9	48.2	48.5	48.9	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.1
≥ 20000		43.8	45.9	49.1	52.0	52.2	52.7	53.0	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.3
≥ 18000		43.8	45.9	49.1	52.0	52.2	52.7	53.0	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.3
≥ 16000		43.8	45.9	49.1	52.0	52.2	52.7	53.0	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.3
≥ 14000		44.6	46.7	49.9	52.8	53.0	53.5	53.5	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.1
≥ 12000		47.1	49.9	53.5	56.5	56.7	57.2	57.6	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.8
≥ 10000		51.1	54.2	58.0	61.2	61.5	62.0	62.3	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.5
≥ 9000		54.7	58.7	62.5	65.8	66.0	66.5	66.7	66.9	66.9	66.9	66.9	66.9	66.9	66.9	67.1
≥ 8000		55.8	60.0	63.9	67.3	67.5	68.0	68.4	68.6	68.6	68.6	68.6	68.7	68.7	68.7	68.8
≥ 7000		58.9	64.0	68.3	71.9	72.4	72.9	73.2	73.5	73.5	73.5	73.6	73.6	73.6	73.6	73.7
≥ 6000		61.2	66.3	70.9	74.6	75.4	75.9	76.2	76.5	76.5	76.5	76.6	76.6	76.6	76.6	76.7
≥ 5000		63.6	69.1	74.1	78.0	78.6	79.1	79.5	79.8	79.8	79.8	79.9	79.9	79.9	79.9	80.0
≥ 4500		65.5	71.2	76.3	80.3	80.9	81.3	81.8	82.0	82.0	82.0	82.2	82.2	82.2	82.2	82.3
≥ 4000		66.8	72.7	78.2	82.5	83.1	83.6	84.2	84.4	84.4	84.4	84.5	84.5	84.5	84.5	84.7
≥ 3500		68.1	74.0	79.5	84.3	84.9	85.4	86.0	86.2	86.2	86.2	86.3	86.3	86.3	86.3	86.4
≥ 3000		69.8	75.7	81.7	86.6	87.3	87.8	88.3	88.6	88.6	88.6	88.7	88.7	88.7	88.7	88.8
≥ 2500		71.2	77.3	83.5	88.3	89.1	89.5	90.1	90.4	90.4	90.4	90.5	90.5	90.5	90.5	90.6
≥ 2000		72.5	78.7	85.0	90.0	90.7	91.2	91.8	92.0	92.0	92.0	92.2	92.2	92.2	92.2	92.3
≥ 1800		73.4	79.5	86.1	91.3	92.2	92.6	93.2	93.5	93.5	93.5	93.6	93.6	93.6	93.6	93.7
≥ 1500		74.0	80.1	87.0	92.4	93.3	93.8	94.4	94.6	94.6	94.6	94.8	94.8	94.8	94.8	94.9
≥ 1200		74.2	80.4	87.4	92.7	93.7	94.2	94.8	95.0	95.0	95.0	95.1	95.1	95.1	95.1	95.2
≥ 1000		74.2	80.4	87.5	92.9	93.9	94.4	95.0	95.2	95.2	95.2	95.4	95.4	95.4	95.4	95.5
≥ 900		74.2	80.4	87.5	93.0	94.1	94.5	95.1	95.4	95.4	95.4	95.5	95.5	95.5	95.5	95.6
≥ 800		74.2	80.4	87.6	93.2	94.3	94.8	95.5	95.7	95.7	95.7	95.8	95.8	95.8	95.8	96.0
≥ 700		74.2	80.4	87.6	93.5	94.5	95.0	95.7	96.0	96.0	96.0	96.1	96.1	96.1	96.1	96.2
≥ 600		74.2	80.4	87.6	93.6	94.8	95.2	96.1	96.3	96.3	96.3	96.4	96.4	96.4	96.4	96.6
≥ 500		74.2	80.4	87.6	93.9	95.2	95.7	96.9	97.3	97.3	97.3	97.4	97.4	97.4	97.4	97.5
≥ 400		74.2	80.5	87.8	94.1	95.4	96.1	97.5	97.9	97.9	97.9	98.0	98.0	98.0	98.0	98.1
≥ 300		74.2	80.6	87.9	94.2	95.7	96.4	98.1	98.5	98.5	98.5	98.6	98.6	98.6	98.6	98.7
≥ 200		74.2	80.6	87.9	94.5	96.1	96.8	98.6	99.0	99.2	99.2	99.3	99.3	99.3	99.5	99.6
≥ 100		74.2	80.6	87.9	94.5	96.1	96.8	98.6	99.0	99.2	99.2	99.3	99.3	99.3	99.5	99.6
≥ 0		74.2	80.6	87.9	94.5	96.1	96.8	98.6	99.0	99.2	99.2	99.3	99.3	99.3	99.6	100.0

TOTAL NUMBER OF OBSERVATIONS 841

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

MAY
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0300-0500
HOURS

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ .	≥ 0
NO CEILING		26.7	29.7	32.9	37.0	39.0	40.3	41.7	42.0	42.5	42.6	42.6	42.6	42.7	42.7	42.8
≥ 20000		30.4	31.1	33.1	43.3	45.5	46.8	48.2	48.5	49.0	49.1	49.1	49.1	49.2	49.2	49.4
≥ 18000		30.4	34.1	38.1	43.3	45.5	46.8	48.2	48.5	49.0	49.1	49.1	49.1	49.2	49.2	49.4
≥ 16000		30.4	34.1	38.1	43.3	45.5	46.8	48.2	48.5	49.0	49.1	49.1	49.1	49.2	49.2	49.4
≥ 14000		30.7	34.5	38.4	43.7	45.9	47.1	48.7	49.0	49.5	49.7	49.7	49.7	49.8	49.8	49.9
≥ 12000		33.2	37.0	41.2	47.1	49.4	50.6	52.2	52.5	53.0	53.2	53.2	53.2	53.3	53.3	53.4
≥ 10000		36.7	41.1	46.2	53.2	55.9	57.2	58.8	59.1	59.6	59.8	59.8	59.8	60.0	60.0	60.1
≥ 9000		28.4	43.4	48.8	56.0	58.7	60.0	61.7	62.0	62.5	62.7	62.7	62.7	62.9	62.9	63.0
≥ 8000		39.9	45.1	50.6	58.2	60.9	62.3	64.0	64.5	65.0	65.2	65.2	65.2	65.3	65.3	65.4
≥ 7000		42.4	48.0	54.2	62.3	65.1	66.7	68.5	68.9	69.4	69.6	69.6	69.6	69.7	69.7	69.8
≥ 6000		44.7	50.8	57.7	66.0	69.4	71.0	72.9	73.3	73.8	74.0	74.0	74.0	74.2	74.2	74.3
≥ 5000		45.9	52.5	59.7	68.6	72.3	74.0	76.1	76.6	77.1	77.3	77.3	77.3	77.4	77.4	77.5
≥ 4500		47.4	54.6	62.0	71.2	74.7	76.5	78.7	79.2	79.6	79.9	79.9	79.9	80.0	80.0	80.1
≥ 4000		49.1	56.7	64.4	73.9	77.6	79.7	82.0	82.4	82.9	83.1	83.1	83.1	83.2	83.2	83.4
≥ 3500		49.7	57.6	65.3	74.9	78.6	80.7	83.0	83.5	83.9	84.2	84.3	84.3	84.4	84.4	84.5
≥ 3000		51.7	59.7	68.0	77.8	81.6	83.9	86.4	86.8	87.3	87.5	87.7	87.7	87.8	87.8	87.9
≥ 2500		53.0	61.1	70.0	80.4	84.4	86.7	89.2	89.6	90.1	90.3	90.5	90.5	90.6	90.6	90.7
≥ 2000		53.8	61.9	71.0	81.6	85.6	87.9	90.3	90.8	91.3	91.5	91.6	91.6	91.7	91.7	91.9
≥ 1800		54.0	62.2	71.4	82.1	86.0	88.5	90.9	91.4	91.9	92.1	92.2	92.2	92.3	92.3	92.4
≥ 1500		54.5	62.9	72.2	83.2	87.2	89.9	92.5	93.0	93.5	93.7	93.8	93.8	93.9	93.9	94.1
≥ 1200		54.7	63.1	72.4	83.6	87.5	90.2	92.9	93.4	93.8	94.1	94.2	94.2	94.3	94.3	94.4
≥ 1000		54.7	63.1	72.4	83.6	87.7	90.3	93.1	93.6	94.1	94.3	94.4	94.4	94.5	94.5	94.6
≥ 900		54.7	63.1	72.4	83.6	87.8	90.5	93.2	93.7	94.2	94.4	94.5	94.5	94.6	94.6	94.8
≥ 800		54.7	63.1	72.4	83.6	87.9	90.6	93.4	93.8	94.3	94.5	94.6	94.6	94.8	94.8	94.9
≥ 700		54.7	63.1	72.5	83.7	88.1	90.8	93.7	94.3	94.8	95.0	95.1	95.1	95.2	95.2	95.3
≥ 600		54.7	63.1	72.5	83.8	88.4	91.3	94.2	94.8	95.2	95.6	95.7	95.7	95.8	95.8	95.9
≥ 500		54.7	63.1	72.5	83.8	88.4	91.5	94.5	95.1	95.6	96.0	96.2	96.2	96.3	96.3	96.4
≥ 400		54.7	63.1	72.5	83.8	88.5	91.7	94.8	95.5	95.9	96.4	96.5	96.5	96.6	96.6	96.9
≥ 300		54.7	63.1	72.5	83.8	88.5	91.7	95.0	95.9	96.5	97.3	97.4	97.4	97.6	97.6	97.8
≥ 200		54.7	63.1	72.5	83.8	88.5	91.7	95.0	95.9	96.5	97.4	97.6	97.8	98.0	98.0	98.4
≥ 100		54.7	63.1	72.5	83.8	88.5	91.7	95.0	95.9	96.6	97.7	98.3	98.5	98.8	99.0	99.4
≥ 0		54.7	63.1	72.5	83.8	88.5	91.7	95.0	95.9	96.6	97.7	98.3	98.5	98.8	99.0	100.0

TOTAL NUMBER OF OBSERVATIONS 859

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

DAY

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0600-0800
HOURS LST

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥1/8	≥.	≥0
NO CEILING ≥ 20000		22.5	26.0	31.2	33.0	36.6	36.8	37.6	37.7	37.7	37.7	37.7	37.7	37.7	37.7	37.8
≥ 18000		28.2	32.9	40.1	45.4	46.0	46.3	47.1	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.4
≥ 16000		28.3	32.9	40.1	45.4	46.0	46.3	47.1	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.4
≥ 14000		28.9	33.5	40.9	46.4	47.1	47.5	48.4	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.6
≥ 12000		31.8	37.0	45.0	51.0	51.7	52.1	53.0	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.2
≥ 10000		34.7	40.5	49.9	57.3	58.3	58.8	60.1	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.3
≥ 9000		35.7	41.6	51.4	58.8	59.7	60.3	61.7	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.9
≥ 8000		36.1	42.2	52.1	59.6	60.6	61.2	62.6	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.8
≥ 7000		37.6	43.7	53.8	61.5	62.4	63.2	64.6	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.8
≥ 6000		40.6	46.8	57.7	66.2	67.2	68.0	69.4	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.6
≥ 5000		42.7	49.2	60.8	70.0	71.2	72.2	73.9	74.0	74.1	74.1	74.1	74.1	74.1	74.1	74.2
≥ 4500		44.0	50.9	62.6	71.8	73.1	74.3	75.9	76.0	76.1	76.1	76.1	76.1	76.1	76.1	76.3
≥ 4000		45.9	52.9	65.0	74.9	76.1	77.4	79.1	79.2	79.5	79.5	79.5	79.5	79.5	79.5	79.6
≥ 3500		47.4	54.4	66.6	76.8	78.2	79.6	81.3	81.4	81.7	81.8	81.8	81.8	81.8	81.8	81.9
≥ 3000		50.2	57.7	70.2	81.0	82.5	84.4	86.4	86.5	86.7	86.8	86.8	86.8	86.8	86.8	86.9
≥ 2500		51.7	59.2	71.7	82.6	84.2	86.2	88.4	88.6	88.9	89.0	89.0	89.0	89.0	89.0	89.1
≥ 2000		52.8	60.2	72.8	83.8	85.6	87.7	90.0	90.3	90.5	90.6	90.6	90.6	90.6	90.6	90.7
≥ 1800		53.2	60.8	73.6	84.6	86.4	88.5	90.8	91.1	91.3	91.4	91.4	91.4	91.4	91.4	91.5
≥ 1500		54.5	62.0	75.1	86.2	88.3	90.5	92.8	93.0	93.2	93.3	93.3	93.3	93.3	93.3	93.5
≥ 1200		54.8	62.6	75.8	87.4	89.7	91.9	94.4	94.6	94.8	95.0	95.0	95.0	95.0	95.0	95.1
≥ 1000		54.8	62.6	75.8	87.6	90.3	92.4	95.3	95.5	95.8	95.9	95.9	95.9	95.9	95.9	96.0
≥ 900		54.8	62.6	75.8	87.7	90.5	92.7	95.5	95.8	96.0	96.1	96.1	96.1	96.1	96.1	96.2
≥ 800		54.9	62.7	75.9	87.8	90.7	92.9	96.0	96.3	96.6	96.7	96.7	96.7	96.7	96.7	96.8
≥ 700		54.9	62.7	75.9	87.8	90.7	92.9	96.0	96.3	96.6	96.7	96.7	96.7	96.7	96.7	96.8
≥ 600		54.9	62.7	75.9	88.1	90.9	93.2	96.6	96.9	97.2	97.4	97.4	97.4	97.4	97.4	97.5
≥ 500		54.9	62.7	75.9	88.2	91.1	93.5	97.0	97.4	97.9	98.1	98.1	98.1	98.1	98.1	98.2
≥ 400		54.9	62.7	75.9	88.3	91.2	93.6	97.5	97.8	98.5	98.7	98.9	98.9	98.9	98.9	99.0
≥ 300		54.9	62.7	75.9	88.3	91.2	93.7	97.6	97.9	98.7	99.1	99.3	99.5	99.5	99.5	99.7
≥ 200		54.9	62.7	75.9	88.3	91.2	93.7	97.6	97.9	98.7	99.1	99.4	99.7	99.7	99.7	99.8
≥ 100		54.9	62.7	75.9	88.3	91.2	93.7	97.6	97.9	98.7	99.1	99.4	99.7	99.7	99.7	99.8
≥ 0		54.9	62.7	75.9	88.3	91.2	93.7	97.6	97.9	98.7	99.1	99.4	99.7	99.7	99.7	100.0

TOTAL NUMBER OF OBSERVATIONS 872

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

MAY
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0900-1100
HOURS LST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/8	≥ 1/16	≥ 0
NO CEILING		34.4	35.9	37.6	38.5	38.9	38.9	39.2	39.2	39.2	39.2	39.2	39.2	39.2	39.2	39.2
≥ 20000		45.0	47.1	49.5	50.6	50.9	50.9	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3
≥ 18000		45.1	47.2	49.8	50.8	51.2	51.2	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
≥ 16000		45.1	47.2	49.8	50.8	51.2	51.2	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
≥ 14000		47.0	49.3	52.0	53.0	53.4	53.4	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7	53.7
≥ 12000		50.6	52.9	55.9	56.9	57.3	57.3	57.6	57.6	57.6	57.6	57.6	57.6	57.6	57.6	57.6
≥ 10000		53.4	55.9	59.4	60.8	61.2	61.2	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7
≥ 9000		53.9	56.7	60.3	61.9	62.4	62.5	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0
≥ 8000		54.2	57.1	60.8	62.4	62.8	63.0	63.4	63.4	63.4	63.4	63.4	63.4	63.4	63.4	63.4
≥ 7000		55.4	58.6	62.4	64.0	64.5	64.6	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
≥ 6000		56.6	60.1	64.1	65.9	66.3	66.4	66.9	66.9	66.9	66.9	66.9	66.9	66.9	66.9	66.9
≥ 5000		59.8	63.5	67.8	69.7	70.1	70.3	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7
≥ 4500		62.0	65.9	70.5	72.3	72.8	72.9	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4
≥ 4000		64.9	69.0	73.8	76.0	76.5	76.7	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2
≥ 3500		69.3	73.5	78.4	80.7	81.1	81.4	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8
≥ 3000		74.1	78.5	83.6	86.2	86.8	87.0	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5
≥ 2500		76.9	81.7	87.0	90.0	90.9	91.2	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7
≥ 2000		78.6	83.9	89.2	92.4	93.2	93.5	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
≥ 1800		79.4	84.7	90.3	93.6	94.6	94.9	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4
≥ 1500		80.4	85.8	91.7	95.0	95.9	96.3	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
≥ 1200		80.4	85.9	92.0	95.7	96.6	97.0	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5
≥ 1000		80.6	86.1	92.2	96.1	97.1	97.5	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 900		80.6	86.2	92.4	96.2	97.2	97.6	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 800		80.6	86.3	92.7	96.6	97.3	97.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 700		80.9	86.6	92.8	96.9	98.0	98.5	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 600		80.9	86.6	92.8	96.9	98.0	98.5	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 500		80.9	86.6	92.8	96.9	98.0	98.5	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 400		80.9	86.6	92.8	96.9	98.0	98.5	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 300		80.9	86.6	92.8	96.9	98.0	98.5	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 200		80.9	86.6	92.8	96.9	98.0	98.5	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 100		80.9	86.6	92.8	96.9	98.0	98.5	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 0		80.9	86.6	92.8	96.9	98.0	98.5	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

07-76
YEARS

MAY
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1200-1400
HOURS CST

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/10	≥ .	≥ 0
NO CEILING		34.7	34.8	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0
≥ 20000		51.7	52.3	52.7	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8
IV 18000		52.3	52.9	53.3	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4
IV 16000		52.3	52.9	53.3	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4
IV 14000		54.0	54.5	54.9	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
IV 12000		57.5	58.0	58.4	58.5	58.5	58.5	58.5	58.5	58.5	58.5	58.5	58.5	58.5	58.5	58.5
IV 10000		59.4	60.1	60.5	60.7	60.8	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0
IV 9000		61.0	61.9	62.2	62.5	62.6	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7
IV 8000		61.9	63.1	63.5	63.8	63.9	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0
IV 7000		63.9	65.0	65.5	65.7	65.9	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0
IV 6000		68.2	69.5	70.6	71.0	71.1	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2
IV 5000		74.1	75.6	76.9	77.3	77.4	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5
IV 4500		78.0	79.5	80.8	81.1	81.2	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4
IV 4000		82.8	84.4	85.8	86.1	86.2	86.4	86.4	86.4	86.4	86.4	86.4	86.4	86.4	86.4	86.4
IV 3500		85.9	87.6	89.2	89.5	89.6	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7
IV 3000		89.2	91.6	93.5	93.9	94.1	94.2	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3
IV 2500		90.8	93.2	95.2	95.8	95.9	96.2	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3
IV 2000		91.7	94.3	96.5	97.1	97.2	97.4	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6
IV 1800		92.1	94.6	96.9	97.4	97.6	97.8	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9
IV 1500		92.3	94.9	97.2	98.1	98.4	98.6	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
IV 1200		92.5	95.1	97.4	98.4	98.6	99.0	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
IV 1000		92.5	95.1	97.4	98.4	98.6	99.0	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
IV 900		92.5	95.1	97.4	98.4	98.7	99.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
IV 800		92.5	95.1	97.4	98.4	98.7	99.2	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
IV 700		92.7	95.2	97.6	98.5	98.8	99.3	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
IV 600		92.7	95.2	97.6	98.5	98.8	99.3	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
IV 500		92.7	95.2	97.6	98.5	98.8	99.3	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
IV 400		92.7	95.2	97.6	98.6	99.0	99.4	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 300		92.7	95.2	97.6	98.6	99.0	99.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 200		92.7	95.2	97.6	98.6	99.0	99.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 100		92.7	95.2	97.6	98.6	99.0	99.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 0		92.7	95.2	97.6	98.6	99.0	99.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

858

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-70
YEARS

MAY
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1500-1700
HOURS LST

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	>1	≥¾	≥¾	≥½	≥¼	≥0	≥0
NO CEILING		34.2	34.2	34.3	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4
≥ 20000		54.0	54.0	54.1	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2
≥ 18000		54.4	54.4	54.5	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
≥ 16000		54.5	54.5	54.6	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7
≥ 14000		56.8	56.8	57.0	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1
≥ 12000		60.6	60.7	60.8	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0
≥ 10000		64.2	64.4	64.6	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7
≥ 9000		65.6	65.8	66.2	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3
≥ 8000		66.2	66.4	66.7	67.0	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
≥ 7000		68.3	68.5	69.1	69.3	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5
≥ 6000		74.4	74.6	75.2	75.8	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9
≥ 5000		79.8	80.2	80.8	81.5	81.8	81.8	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0
≥ 4500		82.4	82.8	83.5	84.2	84.6	84.6	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7	84.7
≥ 4000		88.1	88.9	89.3	91.2	91.5	91.5	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6
≥ 3500		89.5	90.3	91.4	92.7	93.0	93.0	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2
≥ 3000		92.1	92.9	94.1	95.6	96.0	96.0	96.2	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3
≥ 2500		93.4	94.3	95.5	97.2	97.5	97.5	97.8	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9
≥ 2000		93.9	94.8	96.0	97.6	98.0	98.0	98.2	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3
≥ 1800		94.1	95.0	96.2	98.0	98.3	98.3	98.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 1500		94.3	95.3	96.7	98.5	98.8	98.8	99.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 1200		94.3	95.3	96.7	98.5	98.8	98.9	99.3	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 1000		94.3	95.3	96.7	98.5	98.8	98.9	99.3	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 900		94.3	95.3	96.7	98.5	98.8	98.9	99.3	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 800		94.3	95.3	96.7	98.5	98.8	98.9	99.3	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 700		94.3	95.3	96.7	98.5	98.8	98.9	99.3	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 600		94.3	95.3	96.7	98.5	98.9	99.1	99.4	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 500		94.3	95.3	96.7	98.5	98.9	99.1	99.4	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 400		94.3	95.3	96.7	98.6	99.1	99.2	99.5	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 300		94.3	95.3	96.7	98.6	99.2	99.4	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200		94.3	95.3	96.7	98.6	99.2	99.4	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100		94.3	95.3	96.7	98.6	99.2	99.4	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0		94.3	95.3	96.7	98.6	99.2	99.4	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

848

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-70
PERIOD

MAY
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1800-000
HOURS 1ST

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2.5	≥ 2	≥ 1.5	≥ 1.25	≥ 1	≥ .75	≥ .5	≥ .25	≥ .15	≥ .1	≥ 0
NO CEILING		33.1	34.0	34.5	34.8	34.9	34.9	34.9	34.9	34.9	34.9	34.9	34.9	34.9	34.9	34.9
≥ 20000		49.2	50.5	52.0	52.6	52.8	52.8	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
IV 18000		49.5	50.8	52.2	52.8	53.0	53.0	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1
IV 16000		49.5	50.8	52.2	52.8	53.0	53.0	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1
IV 14000		51.0	52.3	53.7	54.3	54.6	54.6	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7
IV 12000		56.1	57.7	59.1	59.7	59.9	59.9	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
IV 10000		59.9	61.6	63.1	63.7	63.9	63.9	64.1	64.1	64.1	64.1	64.1	64.1	64.1	64.1	64.1
IV 9000		63.6	65.2	67.0	67.9	68.1	68.2	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3
IV 8000		65.5	67.3	69.2	70.1	70.3	70.6	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8
IV 7000		67.6	69.4	71.3	72.2	72.5	72.7	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0
IV 6000		71.9	73.7	75.8	76.7	77.0	77.2	77.5	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6
IV 5000		76.4	78.2	80.7	82.0	82.3	82.6	82.9	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0
IV 4500		77.8	79.6	82.2	84.0	84.3	84.6	84.9	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1
IV 4000		82.2	84.5	87.7	89.4	89.8	90.0	90.5	90.9	91.0	91.0	91.0	91.0	91.0	91.0	91.0
IV 3500		83.9	86.2	89.7	91.5	91.8	92.1	92.5	92.9	93.0	93.0	93.0	93.0	93.0	93.0	93.0
IV 3000		86.4	88.7	92.2	94.1	94.4	94.8	95.4	95.7	95.8	95.8	95.8	95.8	95.8	95.8	95.8
IV 2500		87.0	89.4	92.9	94.8	95.1	95.5	96.1	96.4	96.6	96.6	96.6	96.6	96.6	96.6	96.6
IV 2000		87.9	90.6	94.2	96.4	96.8	97.2	97.7	98.1	98.2	98.2	98.2	98.2	98.2	98.2	98.2
IV 1800		87.9	90.6	94.3	96.7	97.0	97.4	98.0	98.3	98.5	98.5	98.5	98.5	98.5	98.5	98.5
IV 1500		88.1	90.9	94.7	97.0	97.4	97.9	98.5	98.8	98.9	98.9	98.9	98.9	98.9	98.9	98.9
IV 1200		88.3	91.2	95.0	97.4	97.7	98.2	98.8	99.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3
IV 1000		88.3	91.2	95.1	97.5	97.9	98.3	98.9	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5
IV 900		88.3	91.2	95.1	97.5	97.9	98.3	98.9	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5
IV 800		88.3	91.2	95.1	97.5	97.9	98.3	98.9	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5
IV 700		88.3	91.2	95.1	97.5	97.9	98.3	98.9	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5
IV 600		88.3	91.2	95.1	97.5	97.9	98.3	98.9	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5
IV 500		88.3	91.2	95.1	97.7	98.1	98.6	99.2	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 400		88.3	91.2	95.1	97.7	98.1	98.6	99.2	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 300		88.3	91.2	95.1	97.9	98.2	98.7	99.3	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 200		88.3	91.2	95.1	97.9	98.2	98.7	99.3	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 100		88.3	91.2	95.1	97.9	98.2	98.7	99.3	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 0		88.3	91.2	95.1	97.9	98.2	98.7	99.3	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

843

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-75 YEARS

1AY MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

2100-2300 LOCAL TIME

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥0	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥5/16	≥4/16	≥0
NO CEILING		44.3	45.7	47.2	47.6	47.6	47.9	47.9	47.9	47.9	47.9	47.9	47.9	47.9	47.9	47.9
≥ 20000		50.5	51.9	53.8	54.6	54.7	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
≥ 18000		50.5	51.9	53.8	54.6	54.7	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
≥ 16000		50.5	51.9	53.8	54.6	54.7	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
≥ 14000		52.6	54.0	55.9	56.9	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1
≥ 12000		57.0	58.6	60.5	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8
≥ 10000		61.7	63.5	65.4	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8
≥ 9000		64.7	66.8	68.7	69.8	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1
≥ 8000		65.9	68.0	69.9	71.0	71.1	71.6	71.7	71.7	71.7	71.7	71.7	71.7	71.7	71.7	71.7
≥ 7000		70.7	73.1	75.1	76.2	76.3	76.9	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
≥ 6000		74.9	77.6	79.7	80.9	81.0	81.6	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8
≥ 5000		77.4	80.1	82.2	83.5	83.8	84.4	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6
≥ 4500		79.0	82.0	84.7	86.3	86.5	87.1	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3
≥ 4000		80.9	84.0	86.7	88.4	88.6	89.2	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5
≥ 3500		83.1	86.1	89.2	90.9	91.1	91.7	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9
≥ 3000		84.2	87.3	90.6	92.5	92.8	93.5	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
≥ 2500		85.0	88.0	91.4	93.5	93.8	94.5	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0
≥ 2000		86.5	89.6	93.0	95.3	95.7	96.4	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0
≥ 1800		86.8	89.9	93.5	95.7	96.4	97.2	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7
≥ 1500		87.2	90.3	94.0	96.3	97.0	97.7	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5
≥ 1200		87.2	90.3	94.0	96.4	97.2	97.9	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
≥ 1000		87.2	90.3	94.0	96.6	97.5	98.2	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1
≥ 900		87.2	90.3	94.0	96.7	97.6	98.3	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 800		87.2	90.3	94.0	96.7	97.6	98.3	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 700		87.2	90.3	94.0	96.7	97.6	98.3	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 600		87.2	90.3	94.0	96.8	97.7	98.5	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 500		87.2	90.3	94.0	96.9	97.9	98.6	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 400		87.2	90.3	94.1	97.0	98.0	98.7	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 300		87.2	90.3	94.1	97.0	98.2	98.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 200		87.2	90.3	94.1	97.0	98.2	99.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100		87.2	90.3	94.1	97.0	98.2	99.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0		87.2	90.3	94.1	97.0	98.2	99.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 844

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

JU
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0000-0200
HOURS

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 16	≥ .	≥ 0
NO CEILING		46.8	48.5	51.4	53.7	54.3	54.4	54.5	54.5	54.6	54.8	54.8	54.8	54.8	54.8	54.8
≥ 20000		51.7	53.7	57.5	60.0	60.6	60.8	60.9	60.9	61.0	61.1	61.1	61.1	61.1	61.1	61.1
≥ 18000		51.7	53.7	57.5	60.0	60.6	60.8	60.9	60.9	61.0	61.1	61.1	61.1	61.1	61.1	61.1
IV 16000		51.7	53.7	57.5	60.0	60.6	60.8	60.9	60.9	61.0	61.1	61.1	61.1	61.1	61.1	61.1
IV 14000		52.9	54.9	58.7	61.3	61.9	62.0	62.1	62.1	62.2	62.3	62.3	62.3	62.3	62.3	62.3
IV 12000		54.8	56.7	60.5	63.2	63.8	63.9	64.0	64.0	64.1	64.3	64.3	64.3	64.3	64.3	64.3
IV 10000		59.1	61.1	65.6	68.7	69.3	69.4	69.6	69.6	69.7	69.8	69.8	69.8	69.8	69.8	69.8
IV 9000		61.3	63.3	67.9	71.0	71.6	71.7	71.8	71.8	72.0	72.1	72.1	72.1	72.1	72.1	72.1
IV 8000		63.3	65.5	70.2	73.3	73.9	74.1	74.5	74.6	74.7	74.8	74.8	74.8	74.8	74.8	74.8
IV 7000		66.7	69.1	73.8	77.1	77.7	78.1	78.5	78.6	78.7	78.8	78.8	78.8	78.8	78.8	78.8
IV 6000		70.6	73.0	77.9	81.5	82.1	82.4	82.9	83.0	83.2	83.3	83.3	83.3	83.3	83.3	83.3
IV 5000		74.0	76.7	81.6	85.3	86.2	86.5	87.0	87.1	87.2	87.4	87.4	87.4	87.4	87.4	87.4
IV 4500		76.1	78.8	83.9	87.6	88.4	88.8	89.3	89.4	89.5	89.7	89.7	89.7	89.7	89.7	89.7
IV 4000		77.0	79.8	85.2	89.0	89.9	90.3	90.7	90.9	91.0	91.1	91.1	91.1	91.1	91.1	91.1
IV 3500		78.0	80.9	86.3	90.1	91.0	91.3	91.9	92.1	92.2	92.3	92.3	92.3	92.3	92.3	92.3
IV 3000		79.3	82.3	88.0	91.8	92.7	93.0	93.6	93.7	93.9	94.0	94.0	94.0	94.0	94.0	94.0
IV 2500		80.1	83.2	89.3	93.5	94.3	94.8	95.4	95.5	95.7	95.8	95.8	95.8	95.8	95.8	95.8
IV 2000		80.7	83.8	90.1	94.7	95.7	96.1	96.8	96.9	97.0	97.1	97.1	97.1	97.1	97.1	97.1
IV 1800		80.7	83.8	90.1	94.8	95.8	96.3	96.9	97.0	97.1	97.2	97.2	97.2	97.2	97.2	97.2
IV 1500		81.0	84.0	90.5	95.2	96.1	96.6	97.2	97.4	97.5	97.6	97.6	97.6	97.6	97.6	97.6
IV 1200		81.3	84.4	90.9	95.9	97.1	97.6	98.2	98.3	98.4	98.6	98.6	98.6	98.6	98.6	98.6
IV 1000		81.3	84.4	90.9	96.0	97.4	97.8	98.4	98.6	98.7	98.8	98.8	98.8	98.8	98.8	98.8
IV 900		81.3	84.4	90.9	96.0	97.4	97.8	98.4	98.6	98.7	98.8	98.8	98.8	98.8	98.8	98.8
IV 800		81.3	84.4	91.0	96.1	97.6	98.1	98.7	98.8	98.9	99.0	99.0	99.0	99.0	99.0	99.0
IV 700		81.3	84.4	91.2	96.4	97.8	98.3	98.9	99.0	99.2	99.3	99.3	99.3	99.3	99.3	99.3
IV 600		81.3	84.4	91.2	96.4	97.8	98.3	98.9	99.0	99.2	99.3	99.3	99.3	99.3	99.3	99.3
IV 500		81.3	84.4	91.2	96.5	98.0	98.4	99.0	99.2	99.3	99.4	99.4	99.4	99.4	99.4	99.4
IV 400		81.3	84.4	91.2	96.6	98.1	98.6	99.2	99.3	99.4	99.5	99.5	99.5	99.5	99.5	99.5
IV 300		81.3	84.4	91.2	97.0	98.4	98.9	99.6	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0
IV 200		81.3	84.4	91.2	97.0	98.4	98.9	99.6	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0
IV 100		81.3	84.4	91.2	97.0	98.4	98.9	99.6	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0
IV 0		81.3	84.4	91.2	97.0	98.4	98.9	99.6	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 831

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

JUL
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0300-0500
HOURS 151

CEILING (FEET)	VISIBILITY STATUTE MILES															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥⅓	≥⅒	≥0
NO CEILING		28.8	31.6	34.9	41.3	43.2	44.9	47.0	47.3	47.3	47.3	47.3	47.3	47.3	47.3	47.8
≥ 20000		33.8	37.5	40.9	48.3	50.7	52.7	54.9	55.1	55.1	55.1	55.1	55.1	55.1	55.1	55.6
≥ 18000		33.9	37.6	41.0	48.4	50.8	52.8	55.0	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.7
≥ 16000		33.9	37.6	41.0	48.4	50.8	52.8	55.0	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.7
≥ 14000		34.1	37.9	41.3	48.6	51.0	53.1	55.2	55.5	55.5	55.5	55.5	55.5	55.5	55.5	56.0
≥ 12000		37.2	41.4	44.8	52.1	54.6	56.7	58.9	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.6
≥ 10000		40.7	45.0	49.2	57.1	59.6	61.9	64.4	64.8	64.8	64.8	64.8	64.8	64.8	64.8	65.3
≥ 9000		42.1	46.6	51.0	59.1	61.6	63.9	66.5	66.8	66.8	66.8	66.8	66.8	66.8	66.8	67.3
≥ 8000		43.5	48.0	52.6	60.7	63.3	65.7	68.6	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.5
≥ 7000		44.9	49.4	54.4	62.5	65.5	68.0	71.2	71.7	71.7	71.7	71.7	71.7	71.7	71.7	72.3
≥ 6000		47.9	52.8	58.3	67.1	70.3	73.2	76.6	77.1	77.1	77.1	77.1	77.1	77.1	77.2	77.7
≥ 5000		51.9	56.8	62.5	71.8	75.0	78.2	81.8	82.4	82.4	82.4	82.4	82.4	82.4	82.6	83.1
≥ 4500		53.3	58.4	64.3	74.2	77.4	80.7	84.3	84.9	84.9	84.9	84.9	84.9	84.9	85.2	85.6
≥ 4000		55.2	60.3	66.5	76.7	80.2	83.7	87.3	88.1	88.1	88.1	88.1	88.1	88.1	88.3	88.8
≥ 3500		56.5	61.5	67.8	78.4	82.0	85.5	89.3	89.9	89.9	89.9	89.9	89.9	89.9	90.1	90.6
≥ 3000		57.8	62.8	69.4	80.2	83.8	87.6	91.4	92.2	92.2	92.2	92.2	92.2	92.2	92.4	92.9
≥ 2500		58.6	63.7	70.4	81.7	85.4	89.3	93.1	93.8	93.8	93.8	93.8	93.8	93.8	94.1	94.6
≥ 2000		59.7	64.8	71.7	83.1	86.9	90.7	94.6	95.3	95.3	95.3	95.3	95.3	95.3	95.5	96.0
≥ 1800		59.8	64.9	71.8	83.2	87.0	90.8	94.7	95.4	95.4	95.4	95.4	95.4	95.4	95.7	96.1
≥ 1500		60.6	65.7	72.7	84.4	88.2	92.0	95.9	96.6	96.6	96.6	96.6	96.6	96.6	96.9	97.3
≥ 1200		60.6	65.7	73.0	84.7	88.5	92.4	96.3	97.0	97.0	97.0	97.0	97.0	97.0	97.2	97.7
≥ 1000		60.8	66.0	73.2	84.9	88.8	92.8	96.7	97.5	97.5	97.5	97.5	97.5	97.5	97.7	98.2
≥ 900		60.8	66.0	73.3	85.0	88.9	92.9	96.9	97.6	97.6	97.6	97.6	97.6	97.6	97.8	98.3
≥ 800		60.8	66.0	73.3	85.0	88.9	92.9	96.9	97.6	97.6	97.6	97.6	97.6	97.6	97.8	98.3
≥ 700		60.8	66.0	73.3	85.0	88.9	92.9	97.0	97.7	97.7	97.7	97.7	97.7	97.7	97.9	98.4
≥ 600		60.8	66.0	73.3	85.0	88.9	92.9	97.0	97.7	97.7	97.7	97.7	97.7	97.7	97.9	98.4
≥ 500		60.8	66.0	73.3	85.0	89.0	93.2	97.3	98.1	98.1	98.1	98.1	98.1	98.1	98.3	98.8
≥ 400		60.8	66.0	73.3	85.0	89.0	93.2	97.3	98.2	98.2	98.2	98.2	98.2	98.2	98.7	99.2
≥ 300		60.8	66.0	73.3	85.0	89.0	93.2	97.6	98.3	98.3	98.3	98.3	98.3	98.3	98.9	99.8
≥ 200		60.8	66.0	73.3	85.0	89.1	93.4	97.8	98.6	98.6	98.6	98.6	98.6	98.6	99.5	100.0
≥ 100		60.8	66.0	73.3	85.0	89.1	93.4	97.8	98.6	98.6	98.6	98.6	98.6	98.6	99.5	100.0
≥ 0		60.8	66.0	73.3	85.0	89.1	93.4	97.8	98.6	98.6	98.6	98.6	98.6	98.6	99.5	100.0

TOTAL NUMBER OF OBSERVATIONS 829

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032

RHEIN-MAIN APT GERMANY/FRANKFURT

67-76

JUL

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0600-1800
HOURS (LT)

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥5/16	≥¼	≥0
NO CEILING		30.1	33.0	38.3	44.6	45.1	46.1	46.7	46.8	47.0	47.0	47.0	47.0	47.0	47.0	47.1
≥ 20000		37.2	40.5	46.8	53.6	54.2	55.7	56.6	56.7	56.8	56.8	56.8	56.8	56.8	56.8	56.9
≥ 18000		37.2	40.5	46.8	53.7	54.3	55.9	56.7	56.8	56.9	56.9	56.9	56.9	56.9	56.9	57.0
≥ 16000		37.5	40.7	47.1	54.0	54.6	56.1	56.9	57.0	57.1	57.1	57.1	57.1	57.1	57.1	57.3
≥ 14000		38.1	41.3	47.8	54.8	55.4	56.9	57.7	57.8	58.0	58.0	58.0	58.0	58.0	58.0	58.1
≥ 12000		41.5	45.1	51.8	59.4	60.2	61.7	62.6	62.8	62.9	62.9	62.9	62.9	62.9	62.9	63.0
≥ 10000		44.0	48.4	55.7	63.9	65.2	67.3	68.5	68.6	68.7	68.7	68.7	68.7	68.7	68.7	68.9
≥ 9000		45.9	50.5	58.1	66.5	67.8	69.9	71.1	71.2	71.3	71.3	71.3	71.3	71.3	71.3	71.4
≥ 8000		46.1	50.8	58.4	67.0	68.3	70.4	71.5	71.7	71.8	71.8	71.8	71.8	71.8	71.8	71.9
≥ 7000		47.2	52.0	60.0	68.5	69.8	71.9	73.2	73.3	73.4	73.4	73.4	73.4	73.4	73.4	73.5
≥ 6000		50.2	55.0	63.3	73.0	74.2	76.6	77.9	78.1	78.3	78.3	78.3	78.3	78.3	78.3	78.5
≥ 5000		54.1	59.0	67.9	78.0	79.4	82.0	83.4	83.6	83.8	83.8	83.8	83.8	83.8	83.8	84.0
≥ 4500		55.9	60.8	69.7	79.7	81.1	83.8	85.2	85.5	85.7	85.7	85.7	85.7	85.7	85.7	85.8
≥ 4000		58.1	63.0	72.1	82.4	83.8	86.8	88.2	88.4	88.6	88.6	88.6	88.6	88.6	88.6	88.8
≥ 3500		58.3	63.2	72.4	82.8	84.2	87.1	88.6	88.9	89.1	89.1	89.1	89.1	89.1	89.1	89.2
≥ 3000		59.6	64.5	73.8	84.4	86.1	89.2	90.7	91.0	91.2	91.2	91.2	91.2	91.2	91.2	91.3
≥ 2500		60.2	65.3	74.6	85.5	87.2	90.6	92.2	92.4	92.6	92.6	92.6	92.6	92.6	92.6	92.7
≥ 2000		61.4	66.7	76.0	86.9	88.6	92.2	93.7	93.9	94.1	94.1	94.1	94.1	94.1	94.1	94.3
≥ 1800		61.8	67.2	76.5	87.4	89.1	92.6	94.1	94.4	94.6	94.6	94.6	94.6	94.6	94.6	94.7
≥ 1500		63.1	68.5	77.9	89.1	91.0	94.6	96.4	96.6	96.8	96.8	96.8	96.8	96.8	96.8	97.0
≥ 1200		63.5	68.9	78.3	89.8	91.7	95.3	97.1	97.3	97.5	97.5	97.5	97.5	97.5	97.5	97.7
≥ 1000		63.8	69.2	78.9	90.4	92.3	95.9	97.7	97.9	98.1	98.1	98.1	98.1	98.1	98.1	98.2
≥ 900		63.8	69.2	78.9	90.5	92.3	96.3	98.0	98.2	98.5	98.5	98.5	98.5	98.5	98.5	98.6
≥ 800		63.8	69.2	78.9	90.6	92.6	96.4	98.1	98.4	98.6	98.6	98.6	98.6	98.6	98.6	98.7
≥ 700		63.8	69.2	78.9	90.6	92.7	96.5	98.2	98.5	98.7	98.7	98.7	98.7	98.7	98.7	98.8
≥ 600		63.8	69.2	78.9	90.7	92.9	96.6	98.5	98.7	99.1	99.1	99.1	99.1	99.1	99.1	99.2
≥ 500		63.8	69.2	78.9	90.7	93.0	96.8	98.8	99.1	99.5	99.5	99.5	99.5	99.5	99.5	99.6
≥ 400		63.8	69.2	78.9	90.7	93.0	96.8	98.8	99.2	99.8	99.8	99.8	99.8	99.8	99.8	99.9
≥ 300		63.8	69.2	78.9	90.7	93.0	96.8	98.8	99.2	99.8	99.9	99.9	99.9	99.9	99.9	100.0
≥ 200		63.8	69.2	78.9	90.7	93.0	96.8	98.8	99.2	99.8	99.9	99.9	99.9	99.9	99.9	100.0
≥ 100		63.8	69.2	78.9	90.7	93.0	96.8	98.8	99.2	99.8	99.9	99.9	99.9	99.9	99.9	100.0
≥ 0		63.8	69.2	78.9	90.7	93.0	96.8	98.8	99.2	99.8	99.9	99.9	99.9	99.9	99.9	100.0

TOTAL NUMBER OF OBSERVATIONS

854

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT 67-76
STATION NAME YEARS

JUL
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0900-1100
HOURS LST

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 5 16	≥ ¼	≥ 0
NO CEILING		39.1	41.0	42.6	43.7	43.7	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8
≥ 20000		47.3	49.6	51.7	53.0	53.1	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2
≥ 18000		47.4	49.7	51.8	53.1	53.2	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3
IV 16000		47.9	50.2	52.3	53.5	53.7	53.8	53.8	53.8	53.8	53.8	53.8	53.8	53.8	53.8	53.8
IV 14000		48.5	50.9	53.0	54.2	54.4	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5
IV 12000		51.2	54.0	56.1	57.4	57.6	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7
IV 10000		54.7	57.8	60.3	61.8	62.1	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6
IV 9000		56.3	59.4	62.4	64.0	64.3	64.8	64.8	64.8	64.9	64.9	64.9	64.9	64.9	64.9	64.9
IV 8000		57.0	60.5	63.2	65.0	65.4	66.1	66.1	66.1	66.2	66.2	66.2	66.2	66.2	66.2	66.2
IV 7000		58.1	61.7	64.6	66.6	67.1	67.8	67.8	67.8	67.9	67.9	67.9	67.9	67.9	67.9	67.9
IV 6000		61.2	65.0	68.2	70.5	71.1	71.8	71.8	71.8	71.9	71.9	71.9	71.9	71.9	71.9	71.9
IV 5000		65.2	69.1	72.2	74.7	75.4	76.1	76.3	76.3	76.4	76.4	76.4	76.4	76.4	76.4	76.4
IV 4500		66.1	70.0	73.2	75.6	76.3	77.0	77.2	77.2	77.4	77.4	77.4	77.4	77.4	77.4	77.4
IV 4000		69.6	74.1	77.5	79.9	80.6	81.5	81.8	81.8	81.9	81.9	81.9	81.9	81.9	81.9	81.9
IV 3500		72.1	76.4	80.3	82.7	83.4	84.3	84.6	84.6	84.7	84.7	84.7	84.7	84.7	84.7	84.7
IV 3000		75.7	80.5	84.4	87.0	87.8	88.7	89.2	89.2	89.3	89.3	89.3	89.3	89.3	89.3	89.3
IV 2500		78.2	83.3	87.3	90.0	90.8	91.8	92.2	92.2	92.3	92.3	92.3	92.3	92.3	92.3	92.3
IV 2000		80.4	85.6	89.7	92.6	93.4	94.3	94.8	94.8	94.9	94.9	94.9	94.9	94.9	94.9	94.9
IV 1800		81.2	86.5	90.6	93.6	94.4	95.4	95.8	95.8	95.9	95.9	95.9	95.9	95.9	95.9	95.9
IV 1500		82.5	88	92.3	95.5	96.3	97.3	97.8	97.8	97.9	97.9	97.9	97.9	97.9	97.9	97.9
IV 1200		83.5	89.2	93.4	96.6	97.6	98.6	99.1	99.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3
IV 1000		83.5	89.2	93.4	96.6	97.7	98.7	99.3	99.4	99.7	99.7	99.7	99.7	99.7	99.7	99.7
IV 900		83.5	89.2	93.4	96.6	97.7	98.7	99.3	99.4	99.7	99.7	99.7	99.7	99.7	99.7	99.7
IV 800		83.5	89.2	93.4	96.6	97.7	98.7	99.3	99.4	99.7	99.7	99.7	99.7	99.7	99.7	99.7
IV 700		83.5	89.2	93.4	96.6	97.7	98.7	99.4	99.5	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 600		83.5	89.2	93.4	96.6	97.7	98.7	99.4	99.5	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 500		83.5	89.2	93.4	96.6	97.7	98.7	99.4	99.5	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 400		83.5	89.2	93.4	96.6	97.7	98.7	99.4	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 300		83.5	89.2	93.4	96.6	97.7	98.7	99.4	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 200		83.5	89.2	93.4	96.6	97.7	98.7	99.4	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 100		83.5	89.2	93.4	96.6	97.7	98.7	99.4	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 0		83.5	89.2	93.4	96.6	97.7	98.7	99.4	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 862

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

JULY
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1200-1400
HOURS (LT)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/10	≥ 1/20	≥ 0
NO CEILING		39.6	39.6	39.9	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
≥ 20000		50.9	51.0	51.4	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
≥ 18000		51.0	51.1	51.5	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6
≥ 16000		51.1	51.3	51.6	51.7	51.7	51.7	51.7	51.7	51.7	51.7	51.7	51.7	51.7	51.7	51.7
≥ 14000		52.0	52.1	52.5	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6
≥ 12000		56.2	56.3	56.8	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9
≥ 10000		60.7	61.5	62.2	62.5	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7
≥ 9000		62.1	62.9	63.7	64.1	64.2	64.2	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3
≥ 8000		62.8	63.9	64.7	65.1	65.2	65.3	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5
≥ 7000		64.3	65.7	66.6	67.0	67.1	67.2	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5
≥ 6000		68.8	70.5	71.5	71.9	72.0	72.1	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4
≥ 5000		73.7	75.4	76.8	77.3	77.4	77.6	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8
≥ 4500		76.8	78.6	80.1	80.7	80.8	80.9	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2
≥ 4000		82.4	84.4	86.0	86.8	87.0	87.2	87.4	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5
≥ 3500		85.4	87.4	89.0	89.8	90.0	90.2	90.4	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5
≥ 3000		88.8	91.1	92.9	93.8	94.0	94.1	94.4	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5
≥ 2500		89.4	91.8	93.9	94.7	95.1	95.2	95.4	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6
≥ 2000		90.3	92.7	94.8	95.8	96.3	96.5	96.8	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9
≥ 1800		90.8	93.2	95.4	96.4	96.9	97.1	97.4	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5
≥ 1500		91.1	93.5	95.8	96.9	97.4	97.6	97.8	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 1200		91.6	94.0	96.3	97.4	98.0	98.2	98.4	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
≥ 1000		91.8	94.2	96.5	98.2	98.8	99.2	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 900		92.0	94.4	96.6	98.3	98.9	99.3	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 800		92.0	94.4	96.6	98.4	99.0	99.4	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 700		92.0	94.4	96.6	98.4	99.0	99.4	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 600		92.0	94.4	96.6	98.4	99.0	99.4	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 500		92.0	94.4	96.6	98.4	99.0	99.4	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 400		92.0	94.4	96.6	98.4	99.0	99.4	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 300		92.0	94.4	96.6	98.4	99.0	99.4	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200		92.0	94.4	96.6	98.4	99.0	99.4	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100		92.0	94.4	96.6	98.4	99.0	99.4	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0		92.0	94.4	96.6	98.4	99.0	99.4	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

833

USAF ETAC

FORM
JUL 64

0-14-5 (OL A), PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 07-76

JUL
1500-1700
HOURS LST

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥1/16	≥1	≥0
NO CEILING		41.5	41.6	41.6	41.7	41.8	41.8	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9
≥ 20000		52.7	52.8	53.0	53.1	53.2	53.2	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3
IV 18000		52.8	53.0	53.1	53.2	53.3	53.3	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4
IV 16000		52.8	53.0	53.1	53.2	53.3	53.3	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4
IV 14000		54.0	54.1	54.3	54.4	54.5	54.5	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
IV 12000		57.8	58.1	58.3	58.4	58.5	58.5	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.6
IV 10000		64.3	64.8	65.5	65.9	66.0	66.0	66.2	66.2	66.2	66.2	66.2	66.2	66.2	66.2	66.2
IV 9000		65.9	66.4	67.2	67.7	67.8	67.8	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0
IV 8000		66.7	67.2	68.2	69.0	69.1	69.1	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3
IV 7000		69.4	69.7	71.0	71.7	71.9	71.9	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2
IV 6000		74.6	75.2	76.4	77.1	77.4	77.5	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7
IV 5000		81.0	81.6	82.9	83.6	83.9	84.0	84.2	84.2	84.2	84.2	84.2	84.2	84.2	84.2	84.2
IV 4500		83.8	84.4	85.7	86.4	86.6	86.7	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0
IV 4000		86.8	87.8	89.1	90.3	90.5	90.6	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
IV 3500		89.1	90.2	91.5	92.7	92.9	93.0	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4
IV 3000		91.2	92.4	94.1	95.5	95.7	95.9	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2
IV 2500		91.8	93.1	94.9	96.3	96.6	96.8	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
IV 2000		92.5	94.0	95.7	97.2	97.4	97.6	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
IV 1800		92.7	94.1	95.9	97.3	97.5	97.7	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
IV 1500		93.0	94.5	96.4	98.0	98.2	98.5	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
IV 1200		93.6	95.1	97.0	98.7	98.9	99.2	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 1000		93.6	95.1	97.0	98.7	98.9	99.2	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 900		93.6	95.1	97.0	98.7	98.9	99.2	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 800		93.6	95.1	97.0	98.7	98.9	99.2	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 700		93.6	95.1	97.0	98.7	98.9	99.2	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 600		93.6	95.1	97.0	98.7	98.9	99.2	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 500		93.6	95.1	97.0	98.7	98.9	99.2	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 400		93.6	95.1	97.0	98.7	98.9	99.2	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 300		93.6	95.1	97.0	98.7	98.9	99.2	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 200		93.6	95.1	97.0	98.7	98.9	99.2	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 100		93.6	95.1	97.0	98.7	98.9	99.2	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 0		93.6	95.1	97.0	98.7	98.9	99.2	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8

TOTAL NUMBER OF OBSERVATIONS 844

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032

RHEIN-MAIN APT GERMANY/FRANKFURT

67-76

JU

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1800-2000
HOURS LST

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 16	≥ 1	≥ 0
NO CEILING		40.9	41.0	41.4	41.7	41.7	41.7	41.7	41.7	41.7	41.7	41.7	41.7	41.7	41.7	41.7
≥ 20000		56.0	56.8	57.5	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9
IV 18000		56.4	57.3	58.0	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4
IV 16000		56.4	57.3	58.0	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4
IV 14000		57.5	58.6	59.3	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7
IV 12000		60.5	61.8	62.7	63.6	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7
IV 10000		63.8	67.6	69.0	70.2	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3
IV 9000		67.6	69.5	71.6	73.3	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6
IV 8000		68.6	70.5	72.8	74.6	74.9	74.9	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1
IV 7000		71.9	73.8	76.1	77.9	78.2	78.2	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4
IV 6000		75.0	76.9	79.2	81.1	81.4	81.5	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7	81.7
IV 5000		79.6	81.7	84.1	86.1	86.4	86.6	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8
IV 4500		81.3	83.5	86.1	88.1	88.6	88.8	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
IV 4000		84.7	86.9	89.5	91.6	92.1	92.3	92.8	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
IV 3500		85.6	88.0	90.6	92.7	93.3	93.5	94.0	94.1	94.1	94.2	94.2	94.2	94.2	94.2	94.2
IV 3000		86.2	88.7	91.7	94.2	94.8	95.0	95.5	95.6	95.6	95.8	95.8	95.8	95.8	95.8	95.8
IV 2500		87.0	89.6	92.9	95.6	96.3	96.6	97.1	97.2	97.2	97.3	97.3	97.3	97.3	97.3	97.3
IV 2000		87.4	90.1	93.5	96.2	97.1	97.3	97.8	97.9	97.9	98.0	98.0	98.0	98.0	98.0	98.0
IV 1800		87.5	90.2	93.6	96.3	97.2	97.4	97.9	98.0	98.0	98.1	98.1	98.1	98.1	98.1	98.1
IV 1500		87.9	90.7	94.5	97.2	98.0	98.2	98.8	98.9	98.9	99.1	99.1	99.1	99.1	99.1	99.1
IV 1200		88.2	91.3	95.2	97.9	98.7	98.9	99.5	99.6	99.6	99.8	99.8	99.8	99.8	99.8	99.8
IV 1000		88.2	91.3	95.2	98.0	98.8	98.9	99.6	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9
IV 900		88.2	91.3	95.2	98.0	98.8	99.1	99.6	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9
IV 800		88.2	91.3	95.2	98.1	98.9	99.2	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
IV 700		88.2	91.3	95.2	98.1	98.9	99.2	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
IV 600		88.2	91.3	95.2	98.1	98.9	99.2	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
IV 500		88.2	91.3	95.2	98.1	98.9	99.2	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
IV 400		88.2	91.3	95.2	98.1	98.9	99.2	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
IV 300		88.2	91.3	95.2	98.1	98.9	99.2	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
IV 200		88.2	91.3	95.2	98.1	98.9	99.2	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
IV 100		88.2	91.3	95.2	98.1	98.9	99.2	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
IV 0		88.2	91.3	95.2	98.1	98.9	99.2	99.8	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT

67-76

JU

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

2100-2300
HOURS LST

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥1/16	≥.	≥0
NO CEILING		47.2	47.8	48.6	49.1	49.3	49.5	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6
≥ 20000		55.8	56.6	57.6	58.1	58.3	58.4	58.5	58.5	58.5	58.5	58.5	58.5	58.5	58.5	58.5
≥ 18000		55.8	56.6	57.6	58.1	58.3	58.4	58.5	58.5	58.5	58.5	58.5	58.5	58.5	58.5	58.5
≥ 16000		55.8	56.6	57.6	58.1	58.3	58.4	58.5	58.5	58.5	58.5	58.5	58.5	58.5	58.5	58.5
≥ 14000		57.1	58.3	59.3	59.8	60.0	60.1	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2
≥ 12000		59.5	60.7	62.1	62.8	63.2	63.3	63.4	63.4	63.4	63.4	63.4	63.4	63.4	63.4	63.4
≥ 10000		64.7	66.1	67.8	68.7	69.1	69.2	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3
≥ 9000		66.4	68.1	69.8	71.0	71.4	71.5	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9
≥ 8000		68.0	69.7	71.5	72.7	73.1	73.2	73.7	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8
≥ 7000		72.0	73.9	75.8	77.1	77.5	77.7	78.3	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4
≥ 6000		76.7	78.8	80.7	82.1	82.5	82.8	83.4	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5
≥ 5000		80.2	82.4	84.4	85.9	86.4	86.7	87.3	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4
≥ 4500		82.8	85.0	86.9	88.5	89.1	89.3	89.9	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1
≥ 4000		85.5	87.8	89.7	91.4	92.1	92.4	93.0	93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1
≥ 3500		86.3	88.6	90.5	92.4	93.1	93.3	93.9	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1
≥ 3000		87.5	90.1	92.4	94.3	95.0	95.3	95.9	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
≥ 2500		88.2	90.8	93.3	95.4	96.2	96.5	97.1	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 2000		88.5	91.2	93.7	95.8	96.6	96.8	97.5	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7
≥ 1800		88.6	91.3	93.8	95.9	96.7	97.0	97.6	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8
≥ 1500		89.1	91.9	94.5	97.0	97.8	98.1	98.7	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
≥ 1200		89.6	92.4	95.0	97.5	98.3	98.5	99.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 1000		89.6	92.4	95.0	97.5	98.3	98.5	99.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 900		89.6	92.4	95.0	97.5	98.3	98.5	99.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 800		89.6	92.4	95.0	97.5	98.3	98.5	99.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 700		89.6	92.4	95.0	97.5	98.3	98.5	99.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 600		89.6	92.4	95.0	97.5	98.3	98.5	99.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 500		89.6	92.4	95.0	97.5	98.3	98.5	99.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 400		89.6	92.4	95.0	97.5	98.3	98.5	99.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 300		89.6	92.4	95.0	97.5	98.3	98.5	99.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 200		89.6	92.4	95.0	97.5	98.3	98.5	99.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 100		89.6	92.4	95.0	97.5	98.3	98.5	99.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 0		89.6	92.4	95.0	97.5	98.3	98.5	99.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4

TOTAL NUMBER OF OBSERVATIONS

825

USAF ETAC

FORM
JUL 64

0-14-5 (OL-A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

JUL
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0000-0200
HOURS

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/8	≥ 1/16	≥ 0
NO CEILING ≥ 20000		50.0	52.7	57.2	59.9	60.1	60.3	60.5	60.5	60.6	60.6	60.6	60.6	60.6	60.8	60.8
IV 18000		53.6	56.7	61.5	64.2	64.5	64.6	64.9	64.9	65.0	65.0	65.0	65.0	65.0	65.1	65.1
IV 16000		53.6	56.7	61.5	64.2	64.5	64.6	64.9	64.9	65.0	65.0	65.0	65.0	65.0	65.1	65.1
IV 14000		54.1	57.2	62.4	65.1	65.3	65.5	65.7	65.7	65.8	65.8	65.8	65.8	65.8	66.0	66.0
IV 12000		55.8	59.3	64.5	67.2	67.5	67.6	67.8	67.8	67.9	67.9	67.9	67.9	67.9	68.1	68.1
IV 10000		59.9	63.4	68.8	72.0	72.3	72.6	72.9	73.0	73.1	73.1	73.1	73.1	73.1	73.3	73.3
IV 9000		61.6	65.1	70.5	74.0	74.3	74.6	74.9	75.0	75.1	75.1	75.1	75.1	75.1	75.2	75.2
IV 8000		63.0	66.5	71.9	75.5	75.7	76.1	76.4	76.5	76.6	76.6	76.6	76.6	76.6	76.7	76.7
IV 7000		66.3	69.8	75.5	79.2	79.5	79.8	80.1	80.2	80.3	80.3	80.3	80.3	80.3	80.4	80.4
IV 6000		69.4	72.9	78.6	82.4	82.7	83.0	83.3	83.4	83.5	83.5	83.5	83.5	83.5	83.7	83.7
IV 5000		72.5	76.2	82.1	85.9	86.1	86.5	86.8	86.9	87.0	87.0	87.0	87.0	87.0	87.1	87.1
IV 4500		74.9	78.7	84.7	88.9	89.1	89.5	89.9	90.0	90.1	90.1	90.1	90.1	90.1	90.2	90.2
IV 4000		76.5	80.3	86.6	90.8	91.1	91.5	91.8	92.0	92.1	92.1	92.1	92.1	92.1	92.2	92.2
IV 3500		76.7	80.6	87.3	91.7	92.0	92.3	92.7	92.8	92.9	92.9	92.9	92.9	92.9	93.1	93.1
IV 3000		77.2	81.1	88.2	92.8	93.1	93.6	94.1	94.2	94.3	94.3	94.3	94.3	94.3	94.4	94.4
IV 2500		78.5	82.5	89.9	94.4	94.7	95.3	95.8	95.9	96.0	96.0	96.0	96.0	96.0	96.2	96.2
IV 2000		79.0	83.2	90.7	95.3	95.5	96.2	96.7	96.8	96.9	96.9	96.9	96.9	96.9	97.0	97.0
IV 1800		79.2	83.4	91.0	95.5	95.9	96.5	97.0	97.2	97.3	97.3	97.3	97.3	97.3	97.4	97.4
IV 1500		79.5	83.7	91.2	95.9	96.3	96.9	97.4	97.5	97.6	97.6	97.6	97.6	97.6	97.8	97.8
IV 1200		79.5	83.7	91.2	96.4	96.9	97.5	98.1	98.3	98.4	98.4	98.4	98.4	98.4	98.5	98.5
IV 1000		79.5	83.7	91.2	96.4	97.0	97.6	98.3	98.4	98.5	98.5	98.5	98.5	98.5	98.6	98.6
IV 900		79.5	83.7	91.3	96.5	97.2	97.8	98.4	98.5	98.6	98.6	98.6	98.6	98.6	98.8	98.8
IV 800		79.5	83.7	91.5	96.7	97.3	97.9	98.5	98.6	98.8	98.8	98.8	98.8	98.8	98.9	98.9
IV 700		79.5	83.7	91.5	96.7	97.3	97.9	98.5	98.6	98.8	98.8	98.8	98.8	98.8	98.9	98.9
IV 600		79.5	83.7	91.5	96.8	97.4	98.0	98.6	98.8	98.9	98.9	98.9	98.9	98.9	99.0	99.0
IV 500		79.5	83.7	91.5	96.8	97.4	98.0	98.6	98.8	98.9	98.9	98.9	98.9	98.9	99.0	99.0
IV 400		79.5	83.7	91.5	96.8	97.4	98.0	98.8	98.9	99.0	99.0	99.0	99.0	99.0	99.1	99.1
IV 300		79.5	83.7	91.5	96.8	97.4	98.0	98.9	99.0	99.1	99.1	99.1	99.1	99.1	99.3	99.3
IV 200		79.5	83.7	91.5	96.8	97.4	98.0	99.0	99.3	99.4	99.5	99.5	99.5	99.5	99.6	99.6
IV 100		79.5	83.7	91.5	96.8	97.4	98.0	99.0	99.3	99.4	99.5	99.5	99.5	99.6	99.8	99.8
IV 0		79.5	83.7	91.5	96.8	97.4	98.0	99.0	99.3	99.4	99.5	99.5	99.5	99.6	99.9	100.0

TOTAL NUMBER OF OBSERVATIONS

808

DATA PROCESSING BRANCH
USAF ETAC
AIP WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 67-76

JUL

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0300-0500
HOURS U.S.T.

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥¾	≥½	≥¼	≥0	≥0
NO CEILING		27.0	30.5	36.4	43.2	45.6	47.4	49.8	50.2	50.3	50.8	50.8	50.8	50.8	50.8	50.8
≥ 20000		31.0	34.9	41.2	48.4	50.9	53.1	55.6	56.0	56.1	56.6	56.6	56.7	56.7	56.7	56.7
≥ 18000		31.0	34.9	41.2	48.4	50.9	53.1	55.6	56.0	56.1	56.6	56.6	56.7	56.7	56.7	56.7
≥ 16000		31.0	34.9	41.2	48.4	50.9	53.1	55.6	56.0	56.1	56.6	56.6	56.7	56.7	56.7	56.7
≥ 14000		31.4	35.4	41.8	49.0	51.5	53.7	56.2	56.6	56.7	57.2	57.2	57.3	57.3	57.3	57.3
≥ 12000		34.8	38.9	45.9	53.4	56.0	58.2	60.8	61.2	61.3	61.8	61.8	61.9	61.9	61.9	61.9
≥ 10000		38.1	42.6	50.1	58.5	61.1	63.4	66.0	66.5	66.6	67.1	67.2	67.4	67.4	67.4	67.4
≥ 9000		40.4	44.9	52.4	60.9	63.6	65.9	68.6	69.0	69.2	69.6	69.8	69.9	69.9	69.9	69.9
≥ 8000		42.0	46.6	54.2	62.8	65.4	67.7	70.4	70.9	71.0	71.5	71.6	71.7	71.7	71.7	71.7
≥ 7000		43.8	48.6	56.7	65.4	68.1	70.4	73.0	73.5	73.8	74.2	74.4	74.5	74.5	74.5	74.5
≥ 6000		46.6	51.4	60.0	69.3	71.9	74.4	77.0	77.6	78.0	78.5	78.6	78.7	78.7	78.7	78.7
≥ 5000		50.4	55.9	64.9	75.1	77.9	80.7	83.4	84.0	84.4	84.9	85.0	85.1	85.1	85.1	85.1
≥ 4500		51.8	57.2	66.6	76.8	79.7	82.6	85.5	86.1	86.5	86.9	87.1	87.2	87.2	87.2	87.2
≥ 4000		53.0	59.0	68.9	79.6	82.7	86.0	89.1	89.7	90.1	90.6	90.7	90.8	90.8	90.9	90.9
≥ 3500		53.3	59.6	69.5	80.2	83.3	86.6	89.7	90.3	90.7	91.2	91.3	91.4	91.4	91.5	91.5
≥ 3000		54.7	61.1	71.2	82.1	85.2	88.6	91.8	92.4	92.7	93.2	93.3	93.5	93.5	93.6	93.6
≥ 2500		56.1	62.6	72.8	83.9	87.1	90.4	93.7	94.3	94.7	95.2	95.3	95.4	95.4	95.5	95.5
≥ 2000		56.8	63.4	73.5	84.8	88.0	91.4	94.7	95.3	95.6	96.1	96.3	96.4	96.4	96.5	96.5
≥ 1800		56.8	63.5	73.6	84.9	88.3	91.7	94.9	95.5	95.9	96.4	96.5	96.6	96.6	96.7	96.7
≥ 1500		57.2	63.8	74.0	85.4	88.8	92.1	95.5	96.3	96.6	97.1	97.2	97.3	97.3	97.5	97.5
≥ 1200		57.2	63.8	74.0	85.4	88.8	92.3	95.9	96.6	97.1	97.6	97.7	97.8	97.8	97.9	97.9
≥ 1000		57.2	63.8	74.0	85.5	88.9	92.4	96.0	96.7	97.2	97.7	97.8	97.9	97.9	98.1	98.1
≥ 900		57.2	63.8	74.0	85.5	88.9	92.4	96.0	96.7	97.2	97.7	97.8	97.9	97.9	98.1	98.1
≥ 800		57.2	63.8	74.0	85.5	88.9	92.4	96.0	96.7	97.2	97.7	97.8	97.9	97.9	98.1	98.1
≥ 700		57.2	63.8	74.0	85.5	88.9	92.4	96.1	96.9	97.3	97.8	97.9	98.1	98.1	98.2	98.2
≥ 600		57.2	63.8	74.0	85.5	88.9	92.4	96.3	97.0	97.5	97.9	98.1	98.2	98.2	98.3	98.3
≥ 500		57.2	63.8	74.0	85.5	88.9	92.4	96.4	97.1	97.6	98.1	98.2	98.3	98.3	98.4	98.4
≥ 400		57.2	63.8	74.0	85.5	88.9	92.4	96.4	97.1	97.6	98.1	98.2	98.3	98.3	98.4	98.4
≥ 300		57.2	63.8	74.0	85.5	88.9	92.4	96.4	97.1	97.6	98.1	98.2	98.3	98.3	98.4	98.4
≥ 200		57.2	63.8	74.0	85.5	88.9	92.4	96.4	97.1	97.6	98.1	98.2	98.3	98.3	98.4	98.4
≥ 100		57.2	63.8	74.0	85.5	88.9	92.4	96.4	97.1	97.6	98.1	98.2	98.3	98.3	98.4	98.4
≥ 0		57.2	63.8	74.0	85.5	88.9	92.4	96.4	97.1	97.6	98.1	98.2	98.3	98.3	98.4	98.4

TOTAL NUMBER OF OBSERVATIONS 827

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

JUL
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0600-0800
HOURS LST

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥0.16	≥0.1	≥0
NO CEILING		26.1	29.5	35.3	41.9	44.8	45.7	47.0	47.0	47.1	47.4	47.4	47.5	47.5	47.5	47.5
≥ 20000		30.0	34.3	41.0	48.1	51.0	51.9	53.3	53.3	53.5	53.7	53.7	53.8	53.8	53.8	53.9
≥ 18000		30.0	34.3	41.1	48.3	51.2	52.2	53.6	53.6	53.7	53.9	53.9	54.0	54.0	54.0	54.0
≥ 16000		30.0	34.3	41.1	48.3	51.2	52.2	53.6	53.6	53.7	53.9	53.9	54.0	54.0	54.0	54.0
≥ 14000		30.2	34.8	41.6	48.9	51.9	52.9	54.3	54.3	54.4	54.6	54.6	54.7	54.7	54.7	54.7
≥ 12000		32.1	36.9	44.1	51.9	55.2	56.3	57.7	57.7	57.8	58.0	58.0	58.1	58.1	58.1	58.1
≥ 10000		36.2	41.5	49.5	58.0	61.5	62.7	64.2	64.2	64.4	64.6	64.6	64.7	64.7	64.7	64.7
≥ 9000		38.9	44.3	52.5	61.1	64.7	65.9	67.4	67.4	67.5	67.8	67.8	67.9	67.9	67.9	67.9
≥ 8000		39.9	45.4	53.7	62.4	66.1	67.3	68.8	68.8	68.9	69.2	69.2	69.3	69.3	69.3	69.3
≥ 7000		42.3	48.1	57.1	65.9	69.6	70.8	72.3	72.3	72.5	72.7	72.7	72.8	72.8	72.8	72.8
≥ 6000		46.2	52.5	62.1	71.7	75.7	77.0	78.7	78.7	78.8	79.0	79.0	79.1	79.1	79.1	79.1
≥ 5000		50.3	57.1	67.1	77.1	81.5	83.0	84.8	84.8	84.9	85.1	85.1	85.3	85.3	85.3	85.3
≥ 4500		51.6	58.4	68.5	78.6	83.2	84.8	86.5	86.5	86.6	86.9	86.9	87.1	87.1	87.1	87.1
≥ 4000		53.6	60.5	70.6	81.1	85.6	87.1	89.0	89.0	89.1	89.3	89.4	89.7	89.7	89.7	89.7
≥ 3500		54.2	61.4	71.5	82.2	86.6	88.2	90.2	90.2	90.3	90.5	90.6	90.9	90.9	90.9	90.9
≥ 3000		55.1	62.1	73.0	83.7	88.3	89.8	91.9	92.0	92.1	92.4	92.5	92.7	92.7	92.7	92.7
≥ 2500		56.0	63.1	74.0	84.6	89.3	90.9	93.1	93.2	93.3	93.6	93.7	93.9	93.9	93.9	93.9
≥ 2000		57.3	64.4	75.3	86.5	91.2	92.8	95.1	95.2	95.3	95.5	95.7	95.9	95.9	95.9	95.9
≥ 1800		57.7	64.7	75.7	87.0	91.7	93.3	95.5	95.7	95.8	96.0	96.1	96.4	96.4	96.4	96.4
≥ 1500		57.7	64.7	75.7	87.0	91.7	93.4	96.0	96.2	96.4	96.6	96.7	97.0	97.0	97.0	97.0
≥ 1200		57.8	64.8	75.8	87.2	92.0	93.9	96.6	96.8	97.0	97.2	97.3	97.5	97.5	97.5	97.5
≥ 1000		57.8	64.8	76.0	87.5	92.6	94.6	97.4	97.7	97.8	98.0	98.1	98.4	98.4	98.4	98.4
≥ 900		57.8	64.8	76.0	87.5	92.6	94.6	97.4	97.7	97.8	98.0	98.1	98.4	98.4	98.4	98.4
≥ 800		57.8	64.8	76.0	87.5	92.6	94.6	97.4	97.7	97.8	98.0	98.1	98.4	98.4	98.4	98.4
≥ 700		57.8	64.8	76.0	87.5	92.6	94.6	97.4	97.7	97.8	98.0	98.1	98.4	98.4	98.4	98.4
≥ 600		57.8	64.8	76.0	87.5	92.6	94.6	97.7	97.9	98.1	98.4	98.5	98.7	98.7	98.7	98.7
≥ 500		57.8	64.8	76.0	87.5	92.7	95.0	98.1	98.4	98.6	98.9	99.1	99.3	99.3	99.3	99.3
≥ 400		57.8	64.8	76.0	87.5	92.7	95.0	98.2	98.6	98.8	99.3	99.4	99.6	99.6	99.6	99.6
≥ 300		57.8	64.8	76.0	87.5	92.7	95.0	98.2	98.6	98.8	99.3	99.4	99.6	99.6	99.6	99.6
≥ 200		57.8	64.8	76.0	87.5	92.7	95.0	98.2	98.6	98.8	99.3	99.4	99.6	99.6	99.6	99.6
≥ 100		57.8	64.8	76.0	87.5	92.7	95.0	98.2	98.6	98.8	99.4	99.6	99.9	99.9	99.9	100.0
≥ 0		57.8	64.8	76.0	87.5	92.7	95.0	98.2	98.6	98.8	99.4	99.6	99.9	99.9	99.9	100.0

TOTAL NUMBER OF OBSERVATIONS 853

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 07-76

JUL

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0900-1100

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥5/16	≥1/8	≥0
NO CEILING		39.1	41.9	45.1	47.4	47.9	48.1	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2
≥ 20000		45.0	48.0	51.4	54.1	54.6	54.6	54.9	54.9	54.9	54.9	54.9	54.9	54.9	54.9	54.9
IV 18000		45.0	48.0	51.4	54.1	54.6	54.8	54.9	54.9	54.9	54.9	54.9	54.9	54.9	54.9	54.9
IV 16000		45.0	48.0	51.4	54.1	54.6	54.8	54.9	54.9	54.9	54.9	54.9	54.9	54.9	54.9	54.9
IV 14000		45.5	48.6	52.0	54.7	55.2	55.4	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5
IV 12000		47.8	50.9	54.9	58.2	58.7	58.9	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0
IV 10000		53.5	57.0	61.3	64.6	65.0	65.3	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4
IV 9000		55.0	58.7	63.3	66.9	67.5	67.7	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1
IV 8000		55.9	59.7	64.4	68.1	68.7	69.0	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4
IV 7000		58.6	62.6	67.5	71.4	72.1	72.4	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8
IV 6000		61.7	65.8	71.0	75.0	75.8	76.2	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5
IV 5000		64.9	69.5	75.0	79.7	80.5	80.9	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2
IV 4500		65.1	70.7	76.3	81.1	81.9	82.3	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6
IV 4000		68.8	73.7	79.6	84.9	85.7	86.2	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6
IV 3500		70.4	75.4	81.2	86.6	87.4	87.9	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4
IV 3000		73.5	78.5	84.5	90.1	91.0	91.5	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
IV 2500		75.0	80.2	86.3	92.3	93.2	93.8	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4
IV 2000		76.3	81.6	87.8	94.0	95.1	95.7	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4
IV 1800		76.6	81.9	88.1	94.4	95.4	96.0	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
IV 1500		77.2	82.5	89.0	95.4	96.5	97.1	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8
IV 1200		77.7	83.0	89.4	96.2	97.3	97.9	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
IV 1000		77.7	83.0	89.4	96.2	97.3	97.9	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
IV 900		77.7	83.0	89.4	96.2	97.3	97.9	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
IV 800		77.7	83.1	89.6	96.4	97.4	98.1	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
IV 700		77.7	83.1	89.6	96.4	97.5	98.4	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
IV 600		77.7	83.1	89.6	96.4	97.7	98.6	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
IV 500		77.7	83.1	89.6	96.4	97.8	98.7	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
IV 400		77.7	83.1	89.6	96.4	97.8	98.8	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
IV 300		77.7	83.1	89.6	96.4	97.8	98.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 200		77.7	83.1	89.6	96.4	97.8	98.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 100		77.7	83.1	89.6	96.4	97.8	98.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 0		77.7	83.1	89.6	96.4	97.8	98.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 852

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 67-76

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1200-1400

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥5/16	≥.1	≥0
NO CEILING		45.9	46.4	46.9	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0
≥ 20000		54.3	55.1	55.7	55.8	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
IV 18000		54.3	55.1	55.7	55.8	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
IV 16000		54.3	55.1	55.7	55.8	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
IV 14000		55.0	55.7	56.3	56.5	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7	56.7
IV 12000		56.9	57.7	58.6	58.8	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1
IV 10000		62.7	63.4	64.4	64.8	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1
IV 9000		63.9	64.8	65.8	66.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0
IV 8000		64.8	65.6	66.7	67.0	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1
IV 7000		67.4	68.0	69.9	70.8	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3
IV 6000		71.6	73.0	74.3	75.4	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9
IV 5000		78.3	79.8	81.1	82.3	82.8	82.8	82.9	82.9	82.9	82.9	82.9	82.9	82.9	82.9	82.9
IV 4500		81.0	82.9	84.0	85.2	85.7	85.7	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9
IV 4000		85.1	86.6	88.2	89.6	90.1	90.1	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2
IV 3500		87.3	89.0	90.1	92.3	92.8	92.8	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
IV 3000		90.4	92.1	93.9	95.7	96.2	96.2	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3
IV 2500		91.2	92.8	94.7	96.5	97.0	97.0	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1
IV 2000		91.9	93.5	95.5	97.4	97.9	97.9	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
IV 1800		92.3	94.0	96.0	97.9	98.4	98.4	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5
IV 1500		92.6	94.4	96.4	98.4	98.9	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
IV 1200		92.6	94.4	96.4	98.5	99.0	99.0	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1
IV 1000		92.6	94.4	96.4	98.5	99.1	99.1	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
IV 900		92.6	94.4	96.4	98.5	99.1	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
IV 800		92.6	94.4	96.4	98.5	99.1	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
IV 700		92.6	94.4	96.4	98.5	99.1	99.3	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
IV 600		92.6	94.4	96.4	98.5	99.1	99.3	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
IV 500		92.6	94.4	96.4	98.5	99.1	99.3	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
IV 400		92.6	94.4	96.4	98.5	99.1	99.4	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 300		92.6	94.4	96.4	98.5	99.1	99.4	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 200		92.6	94.4	96.4	98.5	99.1	99.4	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 100		92.6	94.4	96.4	98.5	99.1	99.4	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 0		92.6	94.4	96.4	98.5	99.1	99.4	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8

TOTAL NUMBER OF OBSERVATIONS 806

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

JUL
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1000-1700
HOURS

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2.5	≥2	≥1.5	≥1.4	≥1	≥.5	≥.4	≥.3	≥.25	≥.2	≥.1
NO CEILING		46.5	47.4	48.0	48.5	48.5	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8
≥ 20000		57.8	58.3	58.9	59.4	59.4	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6
≥ 18000		57.8	58.3	58.9	59.4	59.4	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6
≥ 16000		57.8	58.3	58.9	59.4	59.4	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6
≥ 14000		59.4	59.6	60.6	61.1	61.1	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4
≥ 12000		61.4	62.6	63.5	64.1	64.1	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3
≥ 10000		67.3	68.0	68.9	69.5	69.5	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1
≥ 9000		69.4	70.4	71.4	72.0	72.0	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6
≥ 8000		71.1	72.2	73.2	73.8	74.2	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4
≥ 7000		74.2	75.3	76.7	77.3	77.8	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0
≥ 6000		80.9	82.1	83.6	84.2	84.7	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9
≥ 5000		84.7	86.2	87.7	88.3	88.8	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
≥ 4500		86.2	87.7	89.3	89.9	90.4	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6
≥ 4000		89.0	90.7	92.6	93.3	94.0	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 3500		90.1	92.1	94.0	94.9	95.4	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
≥ 3000		90.4	92.3	94.3	95.4	96.0	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3
≥ 2500		91.6	93.6	95.6	96.7	97.3	97.5	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8
≥ 2000		92.0	94.0	96.0	97.3	98.0	98.3	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5
≥ 1800		92.0	94.0	96.0	97.4	98.1	98.4	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
≥ 1500		92.1	94.1	96.4	97.8	98.6	98.9	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1
≥ 1200		92.1	94.1	96.4	97.8	98.6	99.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 1000		92.1	94.1	96.4	97.8	98.6	99.0	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 800		92.1	94.1	96.5	97.9	98.8	99.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 700		92.1	94.1	96.5	97.9	98.8	99.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 600		92.1	94.1	96.5	97.9	98.8	99.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 500		92.1	94.1	96.5	97.9	98.8	99.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 400		92.1	94.1	96.5	97.9	98.8	99.3	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 300		92.1	94.1	96.5	97.9	98.9	99.3	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200		92.1	94.1	96.5	97.9	98.9	99.3	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100		92.1	94.1	96.5	97.9	98.9	99.3	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0		92.1	94.1	96.5	97.9	98.9	99.3	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 810

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 67-75

JUL
1600-2000
HOURS

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

CEILING (FEET)	VISIBILITY - STATUTE MILES															
	≥10	≥9	≥8	≥7	≥6	≥5	≥4	≥3	≥2	≥1	≥1/2	≥1/4	≥1/8	≥1/16	≥1/32	≥0
NO CEILING		48.9	49.9	50.5	51.2	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4
≥ 20000		60.6	61.9	62.9	63.8	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0
IV 18000		60.9	62.3	63.3	64.1	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4
IV 16000		61.1	62.4	63.4	64.3	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
IV 14000		62.3	63.6	64.6	65.5	65.7	65.7	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
IV 12000		64.4	65.7	66.8	67.7	67.9	67.9	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1
IV 10000		67.8	69.5	71.0	72.0	72.5	72.6	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7
IV 9000		69.7	71.4	73.2	74.2	74.7	74.9	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1
IV 8000		71.4	73.2	75.1	76.0	76.7	76.9	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
IV 7000		73.8	75.7	77.6	78.7	79.4	79.7	79.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9
IV 6000		79.2	81.2	83.2	84.3	84.9	85.3	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4
IV 5000		81.9	83.9	85.9	87.0	87.7	88.2	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3
IV 4500		84.3	86.2	88.2	89.3	90.0	90.5	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7
IV 4000		87.2	89.6	91.6	92.8	93.5	94.0	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
IV 3500		88.6	90.9	93.0	94.1	95.0	95.5	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
IV 3000		89.4	91.8	93.9	95.0	95.9	96.4	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
IV 2500		90.3	92.6	94.7	95.9	96.9	97.4	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9
IV 2000		90.3	93.2	95.5	96.8	97.8	98.3	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
IV 1800		90.8	93.2	95.3	96.8	97.8	98.3	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
IV 1500		90.8	93.2	95.6	96.9	97.9	98.4	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
IV 1200		90.8	93.2	95.6	96.9	97.9	98.4	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
IV 1000		90.8	93.2	95.6	96.9	97.9	98.4	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
IV 900		90.8	93.2	95.7	97.1	98.0	98.5	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
IV 800		90.8	93.2	95.7	97.1	98.0	98.5	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
IV 700		90.8	93.2	95.7	97.1	98.0	98.5	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
IV 600		90.8	93.2	95.7	97.1	98.0	98.5	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
IV 500		90.8	93.2	95.7	97.1	98.0	98.5	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
IV 400		90.8	93.2	95.7	97.1	98.0	98.5	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
IV 300		90.8	93.2	95.7	97.1	98.0	98.5	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
IV 200		90.8	93.2	95.7	97.1	98.0	98.5	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
IV 100		90.8	93.2	95.7	97.1	98.0	98.5	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
IV 0		90.8	93.2	95.7	97.1	98.0	98.5	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5

TOTAL NUMBER OF OBSERVATIONS 814

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT

67-76

JUL

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

2100-2300
LOCAL TIME

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2.5	≥ 2	≥ 1.5	≥ 1	≥ .75	≥ .5	≥ .25	≥ .15	≥ .1	≥ .05	≥ 0
NO CEILING ≥ 2000'		53.1 57.7	55.2 60.0	57.3 62.7	57.9 63.4	58.2 63.6	58.2 63.6	58.4 63.9	58.4 63.9	58.4 63.9	58.4 63.9	58.4 63.9	58.4 63.9	58.4 63.9	58.4 63.9	58.4 63.9
≥ 18000 ≥ 16000		57.7 57.7	60.0 60.0	62.7 62.7	63.4 63.4	63.6 63.6	63.6 63.6	63.9 63.9	63.9 63.9	63.9 63.9	63.9 63.9	63.9 63.9	63.9 63.9	63.9 63.9	63.9 63.9	63.9 63.9
≥ 14000 ≥ 12000		58.5 60.3	60.9 62.7	63.6 65.6	64.2 66.2	64.5 66.6	64.7 66.7	64.7 67.0	64.7 67.0	64.7 67.0	64.7 67.0	64.7 67.0	64.7 67.0	64.7 67.0	64.7 67.0	64.7 67.0
≥ 10000 ≥ 9000		65.0 67.0	67.7 69.9	70.7 72.9	71.5 73.9	71.9 74.3	72.2 74.5	72.4 74.8	72.4 74.8	72.4 74.8	72.4 74.8	72.4 74.8	72.4 74.8	72.4 74.8	72.4 74.8	72.4 74.8
≥ 8000 ≥ 7000		68.3 71.5	71.3 74.8	74.4 78.1	75.4 79.2	75.7 79.6	76.0 79.8	76.2 80.1	76.2 80.1	76.2 80.1	76.2 80.1	76.2 80.1	76.2 80.1	76.2 80.1	76.2 80.1	76.2 80.1
≥ 6000 ≥ 5000		76.5 80.6	80.1 84.2	83.4 87.7	84.8 89.2	85.1 89.6	85.4 89.9	85.8 90.2	85.8 90.2	85.8 90.2	85.8 90.2	85.8 90.2	85.8 90.2	85.8 90.2	85.8 90.2	85.8 90.2
≥ 4500 ≥ 4000		82.7 84.7	86.4 88.5	90.2 92.3	91.6 93.9	92.2 94.4	92.5 94.7	92.8 95.0	92.8 95.0	92.8 95.0	92.8 95.0	92.8 95.0	92.8 95.0	92.8 95.0	92.8 95.0	92.8 95.0
≥ 3500 ≥ 3000		85.1 85.6	89.1 89.6	92.9 93.4	94.7 95.3	95.2 95.9	95.5 96.3	95.9 96.7	95.9 96.7	95.9 96.7	95.9 96.7	95.9 96.7	95.9 96.7	95.9 96.7	95.9 96.7	95.9 96.7
≥ 2500 ≥ 2000		86.4 86.8	90.3 90.7	94.3 94.7	96.2 96.7	96.9 97.4	97.3 97.8	97.8 98.3	97.8 98.3	97.8 98.3	97.8 98.3	97.8 98.3	97.8 98.3	97.8 98.3	97.8 98.3	97.8 98.3
≥ 1800 ≥ 1500		86.9 87.0	90.8 91.0	94.9 95.0	96.9 97.2	97.6 97.9	98.0 98.3	98.5 98.8	98.5 98.8	98.5 98.8	98.5 98.8	98.5 98.8	98.5 98.8	98.5 98.8	98.5 98.8	98.5 98.8
≥ 1200 ≥ 1000		87.1 87.1	91.1 91.1	95.2 95.2	97.4 97.4	98.3 98.4	98.6 98.6	99.1 99.3	99.1 99.3	99.1 99.3	99.1 99.3	99.1 99.3	99.1 99.3	99.1 99.3	99.1 99.3	99.1 99.3
≥ 900 ≥ 800		87.1 87.1	91.2 91.2	95.3 95.3	97.5 97.5	98.5 98.5	98.9 99.0	99.4 99.5	99.4 99.5	99.4 99.5	99.4 99.5	99.4 99.5	99.4 99.5	99.4 99.5	99.4 99.5	99.4 99.5
≥ 700 ≥ 600		87.1 87.1	91.2 91.2	95.3 95.3	97.5 97.5	98.5 98.5	99.0 99.0	99.5 99.5	99.5 99.5	99.5 99.5	99.5 99.5	99.5 99.5	99.5 99.5	99.5 99.5	99.5 99.5	99.5 99.5
≥ 500 ≥ 400		87.3 87.3	91.3 91.3	95.4 95.4	97.6 97.6	98.6 98.6	99.1 99.1	99.6 99.6	99.6 99.6	99.6 99.6	99.6 99.6	99.6 99.6	99.6 99.6	99.6 99.6	99.6 99.6	99.6 99.6
≥ 300 ≥ 200		87.3 87.3	91.3 91.3	95.4 95.4	97.6 97.6	98.6 98.6	99.1 99.1	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0
≥ 100 ≥ 0		87.3 87.3	91.3 91.3	95.4 95.4	97.6 97.6	98.6 98.6	99.1 99.1	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0

TOTAL NUMBER OF OBSERVATIONS 806

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS

AU

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0000-0200

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥1/16	≥.	≥0
NO CEILING		45.6	49.1	53.8	56.7	57.2	57.8	58.3	58.3	58.6	58.6	58.6	58.6	58.6	58.6	58.6
≥ 20000		49.0	52.5	57.5	60.5	61.0	62.0	62.5	62.5	62.7	62.7	62.7	62.7	62.7	62.7	62.7
≥ 18000		49.1	52.6	57.6	60.6	61.1	62.1	62.6	62.6	62.8	62.8	62.8	62.8	62.8	62.8	62.8
≥ 16000		49.1	52.6	57.6	60.6	61.1	62.1	62.6	62.6	62.8	62.8	62.8	62.8	62.8	62.8	62.8
≥ 14000		50.1	53.6	58.6	61.6	62.1	63.1	63.5	63.5	63.8	63.8	63.8	63.8	63.8	63.8	63.8
≥ 12000		53.1	57.1	62.5	65.9	66.3	67.3	67.8	67.8	68.0	68.0	68.0	68.0	68.0	68.0	68.0
≥ 10000		56.7	62.0	68.8	72.7	73.4	74.5	75.2	75.2	75.5	75.5	75.5	75.5	75.5	75.5	75.5
≥ 9000		58.1	63.3	70.1	74.1	74.8	76.1	77.0	77.0	77.3	77.3	77.3	77.3	77.3	77.3	77.3
≥ 8000		58.9	64.3	71.4	75.7	76.7	77.9	78.9	78.9	79.1	79.1	79.1	79.1	79.1	79.1	79.1
≥ 7000		61.6	67.3	74.6	78.9	80.1	81.3	82.3	82.3	82.5	82.5	82.5	82.5	82.5	82.5	82.5
≥ 6000		63.7	69.4	77.3	81.7	82.9	84.1	85.1	85.1	85.3	85.3	85.3	85.3	85.3	85.3	85.3
≥ 5000		65.1	70.8	79.1	83.6	84.8	86.0	87.0	87.0	87.2	87.2	87.2	87.2	87.2	87.2	87.2
≥ 4500		66.6	72.3	80.7	85.2	86.5	87.7	88.7	88.7	88.9	88.9	88.9	88.9	88.9	88.9	88.9
≥ 4000		67.9	74.0	82.4	87.0	88.3	89.6	90.5	90.5	90.8	90.8	90.8	90.8	90.8	90.8	90.8
≥ 3500		68.7	75.2	83.6	88.3	89.7	90.9	91.9	91.9	92.1	92.1	92.1	92.1	92.1	92.1	92.1
≥ 3000		68.9	75.6	84.0	88.9	90.4	91.7	92.7	92.7	93.0	93.0	93.0	93.0	93.0	93.0	93.0
≥ 2500		69.0	75.7	84.2	89.3	91.0	92.3	93.3	93.3	93.6	93.6	93.6	93.6	93.6	93.6	93.6
≥ 2000		69.6	76.4	85.1	90.2	92.0	93.3	94.4	94.4	94.7	94.7	94.7	94.7	94.7	94.7	94.7
≥ 1800		69.9	76.7	85.3	90.4	92.2	93.6	94.7	94.7	94.9	94.9	94.9	94.9	94.9	94.9	94.9
≥ 1500		70.6	77.4	86.3	91.5	93.7	95.1	96.4	96.5	96.7	96.7	96.7	96.7	96.7	96.7	96.7
≥ 1200		71.0	77.8	86.9	92.1	94.3	95.7	97.0	97.1	97.3	97.3	97.3	97.3	97.3	97.3	97.3
≥ 1000		71.0	77.8	87.0	92.3	94.8	96.2	97.6	97.7	97.9	97.9	97.9	97.9	97.9	97.9	97.9
≥ 900		71.0	77.8	87.0	92.3	94.8	96.2	97.6	97.7	97.9	97.9	97.9	97.9	97.9	97.9	97.9
≥ 800		71.0	77.8	87.0	92.3	94.8	96.2	97.6	97.7	97.9	97.9	97.9	97.9	97.9	97.9	97.9
≥ 700		71.0	77.8	87.0	92.3	94.8	96.2	97.6	97.7	97.9	97.9	97.9	97.9	97.9	97.9	97.9
≥ 600		71.0	77.8	87.0	92.3	94.8	96.2	97.6	97.7	97.9	97.9	97.9	97.9	97.9	97.9	97.9
≥ 500		71.0	77.8	87.0	92.3	94.8	96.2	97.6	97.7	97.9	97.9	97.9	97.9	97.9	97.9	97.9
≥ 400		71.0	77.8	87.0	92.3	94.8	96.2	97.6	97.7	97.9	97.9	97.9	97.9	97.9	97.9	97.9
≥ 300		71.0	77.8	87.0	92.3	94.8	96.2	97.6	97.7	97.9	97.9	97.9	97.9	97.9	97.9	97.9
≥ 200		71.0	77.8	87.0	92.3	94.8	96.2	97.6	97.7	97.9	97.9	97.9	97.9	97.9	97.9	97.9
≥ 100		71.0	77.8	87.0	92.3	94.8	96.2	97.6	97.7	97.9	97.9	97.9	97.9	97.9	97.9	97.9
≥ 0		71.0	77.8	87.0	92.3	94.8	96.2	97.6	97.7	97.9	97.9	97.9	97.9	97.9	97.9	97.9

TOTAL NUMBER OF OBSERVATIONS

823

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032

RHEIN-MAIN APT GERMANY/FRANKFURT

67-76

AUG

STATION

STATION NAME

YEARS

MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

0300-0500
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥5/16	≥¼	≥0
NO CEILING		30.0	39.0	38.7	42.2	46.8	48.5	51.1	51.8	51.8	51.8	51.9	51.9	51.9	52.1	52.3
≥20000		33.0	37.3	43.4	50.9	52.6	54.8	57.5	58.2	58.2	58.2	58.3	58.3	58.3	58.4	58.6
≥18000		33.0	37.3	43.4	50.9	52.6	54.8	57.5	58.2	58.2	58.2	58.3	58.3	58.3	58.4	58.6
≥16000		33.0	37.3	43.4	50.9	52.6	54.8	57.5	58.2	58.2	58.2	58.3	58.3	58.3	58.4	58.6
≥14000		33.4	37.6	43.9	51.5	53.2	55.5	58.2	58.9	58.9	58.9	59.0	59.0	59.0	59.1	59.3
≥12000		35.6	40.1	47.0	55.0	57.0	59.2	62.4	63.2	63.2	63.2	63.3	63.5	63.5	63.6	63.8
≥10000		38.9	44.2	51.8	60.9	63.3	65.9	69.3	70.3	70.3	70.3	70.4	70.5	70.5	70.6	70.9
≥9000		41.0	46.7	54.4	63.6	66.2	68.7	72.5	73.6	73.6	73.6	73.7	73.8	73.8	73.9	74.1
≥8000		42.1	47.8	55.9	65.1	67.8	70.4	74.3	75.3	75.3	75.3	75.4	75.6	75.6	75.7	75.9
≥7000		43.6	49.7	58.3	67.7	70.4	73.1	77.0	78.1	78.1	78.1	78.3	78.4	78.4	78.5	78.7
≥6000		45.5	51.7	60.4	70.3	73.1	75.8	79.9	81.1	81.2	81.2	81.3	81.4	81.4	81.5	81.8
≥5000		47.1	53.7	62.6	72.9	75.7	78.4	82.6	83.8	84.0	84.0	84.1	84.3	84.3	84.4	84.6
≥4500		47.8	54.4	63.7	74.0	76.9	79.6	83.8	85.0	85.2	85.2	85.3	85.4	85.4	85.5	85.8
≥4000		49.1	55.7	65.0	75.7	78.5	81.2	85.7	86.8	87.1	87.1	87.2	87.3	87.3	87.4	87.7
≥3500		49.4	55.9	65.3	76.3	79.2	81.9	86.5	87.7	87.9	87.9	88.0	88.1	88.1	88.2	88.5
≥3000		50.1	56.6	66.3	77.3	80.4	83.2	87.8	89.0	89.2	89.2	89.3	89.4	89.4	89.5	89.8
≥2500		51.1	58.0	68.2	79.7	83.0	85.8	90.5	91.7	91.9	91.9	92.0	92.1	92.1	92.2	92.5
≥2000		51.9	59.0	69.2	80.6	84.3	87.1	91.8	92.9	93.2	93.2	93.3	93.4	93.4	93.5	93.8
≥1800		52.2	59.2	69.6	81.2	84.6	87.4	92.1	93.3	93.5	93.5	93.7	93.8	93.8	93.9	94.1
≥1500		52.6	59.9	70.5	83.0	86.5	89.3	94.2	95.5	95.8	95.8	95.9	96.0	96.0	96.1	96.4
≥1200		52.6	59.9	70.9	83.4	87.0	89.8	94.9	96.2	96.5	96.5	96.6	96.7	96.7	96.8	97.1
≥1000		52.6	60.0	71.0	83.5	87.1	89.9	95.4	96.7	96.9	96.9	97.1	97.2	97.2	97.3	97.5
≥900		52.6	60.0	71.0	83.5	87.1	89.9	95.4	96.7	96.9	96.9	97.1	97.2	97.2	97.3	97.5
≥800		52.6	60.0	71.0	83.7	87.2	90.0	95.5	96.8	97.1	97.1	97.2	97.3	97.3	97.4	97.6
≥700		52.6	60.0	71.1	83.8	87.3	90.1	95.7	96.9	97.2	97.2	97.3	97.4	97.4	97.5	97.8
≥600		52.6	60.0	71.1	83.8	87.3	90.1	95.8	97.1	97.3	97.3	97.4	97.5	97.5	97.6	97.9
≥500		52.6	60.0	71.1	84.0	87.5	90.5	96.1	97.4	97.6	97.6	97.8	97.9	97.9	98.0	98.2
≥400		52.6	60.0	71.1	84.0	87.5	90.7	96.4	97.8	98.0	98.0	98.1	98.2	98.2	98.4	98.6
≥300		52.6	60.0	71.1	84.1	87.8	91.0	96.7	98.1	98.5	98.5	98.6	98.7	98.7	98.9	99.2
≥200		52.6	60.0	71.1	84.1	87.8	91.0	96.7	98.1	98.6	98.6	98.7	98.8	98.8	99.1	99.6
≥100		52.6	60.0	71.1	84.1	87.8	91.0	96.7	98.1	98.6	98.6	98.7	98.8	98.8	99.1	99.6
0		52.6	60.0	71.1	84.1	87.8	91.0	96.7	98.1	98.6	98.6	98.7	98.8	98.8	99.1	100.0

TOTAL NUMBER OF OBSERVATIONS

851

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76

AU
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0600-0800
HOURS

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≤5/16	≤¼	≤0
NO CEILING		25.6	28.3	33.1	40.4	41.6	42.9	44.3	44.4	44.5	44.5	44.5	44.5	44.7	44.7	44.7
≥ 20000		31.8	35.4	41.1	50.2	51.9	53.6	55.2	55.3	55.6	55.6	55.6	55.6	55.7	55.7	55.7
≥ 18000		31.9	35.5	41.2	50.3	52.0	53.7	55.3	55.5	55.7	55.7	55.7	55.7	55.8	55.8	55.8
≥ 16000		31.9	35.5	41.2	50.3	52.0	53.7	55.3	55.5	55.7	55.7	55.7	55.7	55.8	55.8	55.8
≥ 14000		31.9	35.8	41.9	51.3	52.9	54.9	56.6	56.7	57.0	57.0	57.0	57.0	57.1	57.1	57.1
≥ 12000		34.8	39.2	45.6	55.6	57.3	59.4	62.2	62.4	62.6	62.6	62.6	62.6	62.8	62.8	62.9
≥ 10000		37.9	42.9	49.5	60.8	62.9	65.3	68.6	68.8	69.0	69.0	69.0	69.0	69.1	69.1	69.3
≥ 9000		38.7	44.0	50.8	62.5	64.6	67.1	70.3	70.8	71.0	71.0	71.0	71.0	71.1	71.1	71.2
≥ 8000		39.0	44.2	51.2	62.9	65.3	67.9	71.1	71.6	71.8	71.8	71.8	71.8	71.9	71.9	72.0
≥ 7000		40.4	45.9	53.6	65.5	68.1	70.6	74.0	74.5	74.7	74.7	74.7	74.7	74.7	74.8	74.9
≥ 6000		41.4	47.1	54.8	66.8	69.5	72.4	75.9	76.3	76.6	76.6	76.6	76.6	76.7	76.7	76.8
≥ 5000		42.7	48.7	56.6	69.3	72.0	75.1	78.8	79.4	79.8	79.8	79.8	79.8	79.9	79.9	80.0
≥ 4500		43.2	49.2	57.4	70.1	72.9	75.9	79.7	80.3	80.7	80.7	80.7	80.7	80.9	80.9	81.0
≥ 4000		44.3	50.5	59.4	72.3	75.4	78.5	82.4	83.1	83.5	83.5	83.5	83.5	83.6	83.6	83.8
≥ 3500		45.1	51.3	60.3	73.3	76.5	79.7	83.8	84.5	84.9	84.9	84.9	84.9	85.0	85.0	85.2
≥ 3000		45.8	52.1	61.8	75.6	79.1	82.5	86.5	87.2	87.7	87.7	87.7	87.7	87.8	87.8	87.9
≥ 2500		46.9	53.4	63.5	77.8	81.4	84.8	89.3	90.0	90.5	90.5	90.5	90.5	90.6	90.6	90.7
≥ 2000		48.0	54.6	64.7	79.6	83.2	86.5	91.1	91.9	92.3	92.3	92.3	92.3	92.5	92.5	92.6
≥ 1800		48.3	54.9	65.0	79.9	83.6	87.0	91.5	92.3	92.8	92.8	92.8	92.8	92.9	92.9	93.0
≥ 1500		48.7	55.3	65.5	80.6	84.3	87.7	92.2	93.3	93.9	93.9	93.9	93.9	94.0	94.0	94.1
≥ 1200		49.3	55.9	66.4	81.4	85.2	88.6	93.3	94.4	95.0	95.0	95.0	95.0	95.1	95.1	95.2
≥ 1000		49.4	56.0	66.5	81.6	85.3	89.0	93.7	95.0	95.6	95.6	95.6	95.6	95.7	95.7	95.8
≥ 900		49.4	56.0	66.5	81.6	85.3	89.0	93.9	95.1	95.7	95.7	95.7	95.7	95.8	95.8	95.9
≥ 800		49.4	56.0	66.6	81.7	85.4	89.1	94.0	95.2	95.9	95.9	95.9	95.9	96.1	96.1	96.2
≥ 700		49.4	56.0	66.6	81.7	85.5	89.2	94.2	95.5	96.2	96.2	96.2	96.2	96.3	96.3	96.4
≥ 600		49.4	56.0	66.6	81.7	85.5	89.2	94.2	95.6	96.4	96.4	96.4	96.4	96.5	96.5	96.6
≥ 500		49.4	56.0	66.6	81.8	85.6	89.4	94.4	95.9	96.8	96.8	96.8	96.8	96.9	97.0	97.1
≥ 400		49.4	56.0	66.7	82.0	85.8	89.8	94.9	96.5	97.3	97.6	97.6	97.6	97.7	97.7	97.8
≥ 300		49.4	56.0	66.8	82.1	86.0	89.9	95.1	96.9	97.9	98.3	98.3	98.3	98.4	98.5	98.7
≥ 200		49.4	56.0	66.8	82.1	86.0	89.9	95.2	97.0	98.3	98.6	98.6	98.6	98.8	99.0	99.2
≥ 100		49.4	56.0	66.8	82.1	86.0	89.9	95.2	97.0	98.3	98.6	98.6	98.6	98.8	99.0	99.2
≥ 0		49.4	56.0	66.8	82.1	86.0	89.9	95.2	97.0	98.3	98.6	98.6	98.6	98.8	99.1	100.0

TOTAL NUMBER OF OBSERVATIONS 862

2

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATIONRHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME67-76
YEARSALL
MONTHSPERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)0900-1100
HOURS LST

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 16	≥ 1	≥ 0
NO CEILING		38.9	41.4	45.1	47.8	48.1	48.4	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5
≥ 20000		46.2	49.4	54.1	57.1	57.7	58.1	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4
≥ 18000		46.5	49.7	54.3	57.3	57.9	58.4	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.6
≥ 16000		46.5	49.7	54.3	57.3	57.9	58.4	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.6
≥ 14000		47.3	50.6	55.4	58.4	58.9	59.4	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6
≥ 12000		50.3	54.0	59.3	62.6	63.4	63.8	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2
≥ 10000		52.9	56.5	62.0	66.5	67.3	68.0	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6
≥ 9000		54.2	58.0	63.8	68.5	69.7	70.1	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8
≥ 8000		54.6	58.5	64.3	69.0	70.4	70.8	71.5	71.5	71.5	71.5	71.5	71.5	71.5	71.5	71.5
≥ 7000		55.4	59.3	65.1	69.8	71.2	71.6	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
≥ 6000		57.6	61.6	67.6	72.4	73.8	74.3	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9
≥ 5000		60.5	64.8	71.2	76.1	77.5	77.9	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8
≥ 4500		61.4	65.7	72.1	77.0	78.4	78.8	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7
≥ 4000		63.4	68.0	74.9	80.1	81.5	81.9	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0
≥ 3500		64.4	69.0	76.2	81.8	83.3	83.8	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9
≥ 3000		66.0	70.9	78.6	84.2	85.7	86.5	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6
≥ 2500		68.0	73.1	81.4	87.2	88.9	89.7	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1
≥ 2000		70.0	75.3	83.8	89.9	91.8	92.6	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
≥ 1800		70.7	76.1	84.7	90.8	92.7	93.5	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2
≥ 1500		71.2	76.8	85.8	92.1	93.9	94.7	96.8	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9
≥ 1200		71.3	76.9	85.9	92.2	94.2	95.0	97.3	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
≥ 1000		71.3	76.9	86.0	92.4	94.4	95.2	97.6	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 900		71.3	76.9	86.0	92.4	94.4	95.3	97.7	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2
≥ 800		71.3	76.9	86.0	92.6	94.6	95.5	98.1	98.6	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 700		71.3	76.9	86.0	92.6	94.6	95.5	98.4	99.0	99.1	99.1	99.1	99.1	99.1	99.1	99.1
≥ 600		71.3	76.9	86.0	92.6	94.6	95.5	98.4	99.0	99.1	99.1	99.1	99.1	99.1	99.1	99.1
≥ 500		71.3	76.9	86.0	92.6	94.6	95.5	98.5	99.1	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 400		71.3	76.9	86.0	92.6	94.6	95.5	98.6	99.4	99.7	99.7	99.7	99.7	99.7	99.7	99.7
≥ 300		71.3	76.9	86.0	92.6	94.6	95.7	98.7	99.5	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 200		71.3	76.9	86.0	92.6	94.6	95.7	98.7	99.5	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 100		71.3	76.9	86.0	92.6	94.6	95.7	98.7	99.5	99.9	99.9	99.9	99.9	99.9	99.9	99.9
0		71.3	76.9	86.0	92.6	94.6	95.7	98.7	99.5	99.9	99.9	99.9	99.9	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

874

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT 67-76
STATION NAME YEARS

AUG
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1200-1400
HOURS

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ 1/8	≥ 0
NO CEILING		43.3	45.2	46.4	47.6	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7
≥ 20000		56.6	58.2	59.5	60.8	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9
≥ 18000		56.7	58.3	59.6	60.9	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1
≥ 16000		56.7	58.3	59.6	60.9	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1	61.1
≥ 14000		58.0	59.9	61.3	62.6	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7
≥ 12000		62.0	64.5	66.0	67.9	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0
≥ 10000		65.9	69.0	70.9	72.8	73.0	73.0	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3
≥ 9000		66.7	69.8	71.7	73.7	74.0	74.0	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3
≥ 8000		67.1	70.2	72.2	74.4	74.7	74.7	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
≥ 7000		68.5	71.6	73.8	76.1	76.3	76.3	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
≥ 6000		72.3	75.4	77.6	80.0	80.2	80.2	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6
≥ 5000		75.5	78.8	81.3	83.7	83.9	83.9	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3
≥ 4500		77.9	81.3	83.8	86.2	86.4	86.4	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7
≥ 4000		79.8	83.4	86.0	88.4	88.9	88.9	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2
≥ 3500		82.1	85.8	88.5	91.0	91.5	91.5	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8
≥ 3000		84.5	88.3	91.1	93.7	94.3	94.4	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
≥ 2500		86.0	90.1	92.9	95.5	96.1	96.2	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
≥ 2000		87.0	91.1	94.0	96.7	97.5	97.6	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 1800		87.3	91.5	94.4	97.2	98.0	98.1	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
≥ 1500		87.5	91.8	94.9	97.6	98.6	98.7	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 1200		87.5	91.8	94.9	97.6	98.6	98.8	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 1000		87.6	92.1	95.1	97.9	98.8	99.2	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 900		87.6	92.1	95.1	97.9	98.8	99.2	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 800		87.6	92.1	95.1	97.9	98.8	99.2	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 700		87.6	92.1	95.1	97.9	98.8	99.2	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 600		87.6	92.1	95.1	97.9	98.8	99.2	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 500		87.6	92.1	95.1	97.9	98.8	99.2	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 400		87.6	92.1	95.1	97.9	98.8	99.2	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 300		87.6	92.1	95.1	98.0	98.9	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200		87.6	92.1	95.1	98.0	98.9	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100		87.6	92.1	95.1	98.0	98.9	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0		87.6	92.1	95.1	98.0	98.9	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 845

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

400
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1500-1700
HOURS

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥⅓	≥⅒	≥0
NO CEILING		46.8	47.6	48.9	49.5	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6
≥ 20000		58.9	60.0	61.4	62.3	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4
IV 18000		59.2	60.2	61.7	62.5	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6
IV 16000		59.3	60.4	61.8	62.5	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7
IV 14000		61.4	62.7	64.2	65.0	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1
IV 12000		66.8	68.2	69.8	70.6	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7
IV 10000		71.3	73.0	75.0	76.0	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
IV 9000		72.7	74.9	77.0	78.0	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1
IV 8000		73.2	75.5	77.6	78.8	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9
IV 7000		74.5	76.8	79.2	80.4	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5
IV 6000		77.1	79.5	82.4	83.6	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8
IV 5000		81.7	84.4	87.3	88.5	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8
IV 4500		83.8	86.7	89.6	90.8	91.2	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3
IV 4000		86.7	89.6	92.7	93.9	94.3	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5
IV 3500		87.7	90.7	93.8	95.1	95.5	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
IV 3000		88.8	91.8	94.9	96.3	96.7	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0
IV 2500		89.4	92.5	95.6	97.1	97.5	97.9	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
IV 2000		89.6	92.9	96.0	97.5	98.0	98.3	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
IV 1800		89.6	92.9	96.0	97.5	98.0	98.3	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
IV 1500		89.9	93.3	96.4	98.0	98.5	98.9	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
IV 1200		90.0	93.5	96.5	98.1	98.7	99.2	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
IV 1000		90.0	93.5	96.5	98.1	98.7	99.2	99.4	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6
IV 900		90.0	93.5	96.5	98.1	98.7	99.2	99.4	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6
IV 800		90.0	93.5	96.5	98.2	98.8	99.3	99.5	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 700		90.0	93.5	96.5	98.2	98.8	99.3	99.5	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 600		90.0	93.5	96.5	98.2	98.8	99.3	99.5	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV 500		90.0	93.5	96.5	98.3	98.9	99.4	99.6	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
IV 400		90.0	93.5	96.5	98.3	99.0	99.5	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 300		90.0	93.5	96.5	98.3	99.0	99.5	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 200		90.0	93.5	96.5	98.3	99.0	99.5	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 100		90.0	93.5	96.5	98.3	99.0	99.5	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV 0		90.0	93.5	96.5	98.3	99.0	99.5	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS 840

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 67-76

AUG

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1900-2000
HOURS 157

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 9	≥ 8	≥ 7	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2	≥ 1 1/2	≥ 1 1/4	≥ 1 1/8	≥ 1	≥ 3/4	≥ 1/2	≥ 0
NO CEILING		42.6	43.8	45.2	45.8	45.9	46.0	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1
≥ 20000		54.6	56.5	58.4	59.3	59.4	59.8	60.1	60.1	60.1	60.1	60.1	60.1	60.1	60.1	60.1
≥ 18000		55.0	56.8	58.7	59.7	59.8	60.1	60.5	60.5	60.5	60.5	60.5	60.5	60.5	60.5	60.5
≥ 16000		55.1	57.0	58.8	59.8	59.9	60.3	60.6	60.6	60.6	60.6	60.6	60.6	60.6	60.6	60.6
≥ 14000		57.1	59.2	61.2	62.1	62.3	62.6	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0
≥ 12000		61.8	64.3	66.7	67.8	67.9	68.3	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6
≥ 10000		65.6	68.6	71.3	72.6	72.9	73.3	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8
≥ 9000		66.4	69.7	72.4	74.1	74.3	74.6	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2
≥ 8000		66.7	70.0	72.8	74.4	74.6	75.1	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6	75.6
≥ 7000		69.6	73.0	75.8	77.6	77.8	78.3	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8
≥ 6000		73.7	77.2	80.3	82.3	82.7	83.1	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7
≥ 5000		78.3	82.2	85.6	87.6	88.0	88.4	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
≥ 4500		80.0	84.1	87.5	89.6	90.0	90.4	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
≥ 4000		81.6	85.8	89.6	91.9	92.2	92.8	93.6	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8
≥ 3500		82.4	86.7	90.6	92.8	93.2	93.8	94.6	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
≥ 3000		83.8	88.2	92.1	94.5	94.8	95.5	96.5	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
≥ 2500		84.2	88.7	92.7	95.4	95.8	96.5	97.4	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8
≥ 2000		84.4	88.9	92.9	95.9	96.2	96.9	98.0	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3
≥ 1800		84.6	89.0	93.0	96.0	96.3	97.1	98.1	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5
≥ 1500		84.7	89.2	93.2	96.2	96.6	97.3	98.3	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
≥ 1200		84.9	89.4	93.8	96.7	97.1	97.8	98.8	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
≥ 1000		84.9	89.6	94.0	96.9	97.3	98.0	99.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 900		84.9	89.6	94.0	96.9	97.3	98.0	99.2	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 800		84.9	89.6	94.0	96.9	97.3	98.0	99.2	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 700		85.0	89.7	94.1	97.1	97.4	98.1	99.3	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
≥ 600		85.1	89.9	94.2	97.2	97.5	98.2	99.4	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 500		85.1	89.9	94.2	97.2	97.5	98.2	99.4	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 400		85.1	89.9	94.2	97.3	97.6	98.3	99.5	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 300		85.1	89.9	94.2	97.3	97.6	98.3	99.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200		85.1	89.9	94.2	97.3	97.6	98.3	99.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100		85.1	89.9	94.2	97.3	97.6	98.3	99.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0		85.1	89.9	94.2	97.3	97.6	98.3	99.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

848

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

ALL
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

2100-2300
HOURS

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥10	≥¼	≥0
NO CEILING		47.5	49.8	52.3	53.8	53.9	54.2	54.3	54.4	54.5	54.5	54.5	54.5	54.5	54.5	54.5
≥ 20000		53.6	56.3	58.9	60.4	60.5	61.1	61.2	61.3	61.5	61.5	61.5	61.5	61.5	61.5	61.5
≥ 18000		53.7	56.4	59.0	60.5	60.6	61.2	61.3	61.5	61.6	61.6	61.6	61.6	61.6	61.6	61.6
≥ 16000		53.7	56.4	59.0	60.5	60.6	61.2	61.3	61.5	61.6	61.6	61.6	61.6	61.6	61.6	61.6
≥ 14000		55.8	58.5	61.1	62.6	62.7	63.3	63.5	63.6	63.7	63.7	63.7	63.7	63.7	63.7	63.7
≥ 12000		59.7	62.7	65.9	67.6	67.7	68.3	68.4	68.5	68.6	68.6	68.6	68.6	68.6	68.6	68.6
≥ 10000		63.9	67.7	71.7	74.3	74.5	75.1	75.2	75.3	75.4	75.4	75.4	75.4	75.4	75.4	75.4
≥ 9000		65.7	69.4	73.6	76.4	76.6	77.2	77.3	77.4	77.6	77.6	77.6	77.6	77.6	77.6	77.6
≥ 8000		67.2	71.1	75.3	78.3	78.6	79.2	79.3	79.4	79.6	79.6	79.6	79.6	79.6	79.6	79.6
≥ 7000		70.2	74.6	79.0	82.1	82.5	83.1	83.2	83.3	83.4	83.4	83.4	83.4	83.4	83.4	83.4
≥ 6000		72.4	77.3	82.0	85.3	85.7	86.3	86.4	86.5	86.6	86.6	86.6	86.6	86.6	86.6	86.6
≥ 5000		74.0	79.4	84.6	87.9	88.2	88.8	89.0	89.1	89.2	89.2	89.2	89.2	89.2	89.2	89.2
≥ 4500		74.6	80.4	85.7	89.3	89.7	90.2	90.4	90.5	90.6	90.6	90.6	90.6	90.6	90.6	90.6
≥ 4000		76.1	81.9	87.3	91.1	91.7	92.2	92.4	92.5	92.6	92.6	92.6	92.6	92.6	92.6	92.6
≥ 3500		76.4	82.1	87.5	91.3	91.9	92.5	92.6	92.7	92.8	92.8	92.8	92.8	92.8	92.8	92.8
≥ 3000		77.8	83.5	89.1	93.2	93.8	94.4	94.5	94.6	94.7	94.7	94.7	94.7	94.7	94.7	94.7
≥ 2500		78.7	84.7	90.4	94.5	95.3	95.9	96.0	96.1	96.2	96.2	96.2	96.2	96.2	96.2	96.2
≥ 2000		79.6	85.7	91.3	95.4	96.4	97.2	97.4	97.5	97.6	97.6	97.6	97.6	97.6	97.6	97.6
≥ 1800		79.7	85.8	91.4	95.5	96.5	97.3	97.5	97.6	97.8	97.8	97.8	97.8	97.8	97.8	97.8
≥ 1500		79.8	85.9	91.7	95.8	96.7	97.5	97.9	98.0	98.1	98.1	98.1	98.1	98.1	98.1	98.1
≥ 1200		79.8	85.9	91.8	95.9	96.8	97.6	98.1	98.2	98.4	98.4	98.4	98.4	98.4	98.4	98.4
≥ 1000		79.9	86.1	92.1	96.5	97.4	98.4	98.8	98.9	99.1	99.1	99.1	99.1	99.1	99.1	99.1
≥ 900		79.9	86.1	92.1	96.5	97.4	98.4	98.8	98.9	99.1	99.1	99.1	99.1	99.1	99.1	99.1
≥ 800		79.9	86.2	92.2	96.7	97.6	98.7	99.2	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 700		79.9	86.4	92.4	96.8	97.9	98.8	99.3	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5
≥ 600		79.9	86.4	92.4	96.9	98.0	98.9	99.4	99.5	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 500		79.9	86.4	92.4	96.9	98.0	98.9	99.4	99.5	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 400		79.9	86.4	92.4	97.1	98.1	99.1	99.5	99.6	99.9	99.9	99.9	99.9	99.9	99.9	99.9
≥ 300		79.9	86.4	92.4	97.2	98.2	99.2	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 200		79.9	86.4	92.4	97.2	98.2	99.2	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 100		79.9	86.4	92.4	97.2	98.2	99.2	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
≥ 0		79.9	86.4	92.4	97.2	98.2	99.2	99.6	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

851

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032

RHEIN-MAIN APT GERMANY/FRANKFURT

67-76

SE

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0000-0200
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥1/16	≥.	≥0
NO CEILING		28.7	32.5	38.1	43.5	45.6	49.0	51.8	52.5	52.6	52.8	53.1	53.2	53.3	53.3	53.4
≥ 20000		32.3	36.6	43.1	49.4	51.5	55.3	58.3	58.9	59.0	59.2	59.5	59.6	59.7	59.7	59.9
IV 18000		32.3	36.6	43.1	49.4	51.5	55.3	58.3	58.9	59.0	59.2	59.5	59.6	59.7	59.7	59.9
IV 16000		32.3	36.6	43.1	49.4	51.5	55.3	58.3	58.9	59.0	59.2	59.5	59.6	59.7	59.7	59.9
IV 14000		32.6	36.9	43.5	49.8	51.8	55.7	59.6	59.2	59.4	59.6	59.9	60.0	60.1	60.1	60.2
IV 12000		34.1	38.9	45.7	52.6	54.7	58.5	61.5	62.1	62.2	62.4	62.7	62.8	62.9	62.9	63.1
IV 10000		37.1	42.1	50.0	57.4	59.6	63.5	66.6	67.2	67.5	67.7	68.0	68.1	68.2	68.2	68.3
IV 9000		38.8	43.8	51.8	59.6	61.9	66.3	69.5	70.1	70.3	70.6	70.8	70.9	71.1	71.1	71.2
IV 8000		40.5	45.9	54.3	62.2	64.7	69.0	72.2	72.8	73.0	73.3	73.5	73.6	73.8	73.8	73.9
IV 7000		42.7	48.4	56.9	64.9	67.5	71.8	75.0	75.6	75.9	76.1	76.4	76.5	76.6	76.6	76.7
IV 6000		45.9	51.6	60.7	68.7	71.3	75.6	78.8	79.4	79.7	79.9	80.2	80.3	80.4	80.4	80.5
IV 5000		48.0	54.1	63.8	72.4	75.1	79.4	82.6	83.3	83.5	83.7	84.0	84.1	84.2	84.2	84.4
IV 4500		48.9	55.2	65.3	74.0	76.7	81.0	84.2	84.9	85.1	85.3	85.6	85.7	85.8	85.8	86.0
IV 4000		50.2	56.9	67.4	76.4	79.3	83.6	86.8	87.4	87.7	87.9	88.2	88.3	88.4	88.4	88.5
IV 3500		50.9	57.5	68.2	77.3	80.3	84.6	87.9	88.5	88.8	89.0	89.3	89.4	89.5	89.5	89.7
IV 3000		52.3	59.0	69.7	78.3	81.8	86.1	89.5	90.1	90.4	90.6	90.9	91.0	91.1	91.1	91.3
IV 2500		54.2	61.1	72.2	81.4	84.4	88.7	92.2	92.9	93.1	93.3	93.6	93.7	93.8	93.8	94.0
IV 2000		55.3	62.4	73.5	82.8	85.7	90.0	93.6	94.2	94.5	94.7	95.0	95.1	95.2	95.2	95.3
IV 1800		55.7	62.8	74.0	83.3	86.2	90.6	94.2	94.8	95.1	95.3	95.6	95.7	95.8	95.8	95.9
IV 1500		55.9	63.1	74.4	83.7	86.7	91.1	94.7	95.3	95.6	95.8	96.1	96.2	96.3	96.3	96.4
IV 1200		55.0	63.2	74.5	83.8	86.8	91.2	94.8	95.4	95.7	95.9	96.2	96.4	96.6	96.7	96.8
IV 1000		56.0	63.2	74.5	84.1	87.4	91.9	95.4	96.1	96.3	96.6	96.8	96.9	97.0	97.0	97.2
IV 900		56.0	63.2	74.5	84.1	87.4	91.9	95.4	96.1	96.3	96.6	96.8	96.9	97.0	97.0	97.2
IV 800		56.0	63.2	74.5	84.1	87.4	91.9	95.4	96.1	96.3	96.6	96.8	96.9	97.0	97.0	97.2
IV 700		56.0	63.2	74.5	84.2	87.6	92.0	95.6	96.2	96.4	96.7	96.9	97.0	97.2	97.2	97.3
IV 600		56.3	63.4	74.8	84.6	87.9	92.5	96.2	96.8	97.0	97.3	97.5	97.7	97.8	97.8	97.9
IV 500		56.4	63.5	75.1	85.0	88.4	93.0	96.9	97.5	97.8	98.0	98.3	98.4	98.5	98.5	98.6
IV 400		56.5	63.7	75.2	85.1	88.5	93.1	97.3	97.9	98.2	98.4	98.6	98.8	98.9	98.9	99.0
IV 300		56.5	63.7	75.2	85.1	88.5	93.1	97.4	98.0	98.3	98.5	98.8	98.9	99.1	99.3	99.4
IV 200		56.5	63.7	75.2	85.1	88.5	93.1	97.4	98.0	98.3	98.5	98.8	98.9	99.1	99.3	99.4
IV 100		56.5	63.7	75.2	85.1	88.5	93.1	97.4	98.0	98.4	98.6	99.0	99.3	99.4	99.4	99.8
IV 0		56.5	63.7	75.2	85.1	88.5	93.1	97.4	98.0	98.4	98.6	99.0	99.3	99.5	99.5	100.0

TOTAL NUMBER OF OBSERVATIONS 812

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 07-70

SEC

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0300-0500
HOURS LT

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥5/16	≥¼	≥0
NO CEILING		21.9	24.2	28.5	35.9	37.6	39.9	44.9	46.6	47.5	47.7	47.8	47.9	48.4	48.7	49.3
≥ 20000		23.6	26.1	30.8	38.9	40.7	43.6	49.4	51.2	52.1	52.4	52.5	52.7	53.1	53.4	54.0
≥ 18000		23.6	26.1	30.8	38.9	40.7	43.6	49.4	51.2	52.1	52.4	52.5	52.7	53.1	53.4	54.0
IV 16000		23.6	26.1	30.8	38.9	40.7	43.6	49.4	51.2	52.1	52.4	52.5	52.7	53.1	53.4	54.0
≥ 14000		23.9	26.6	31.3	39.4	41.2	44.1	49.9	51.8	52.7	53.0	53.1	53.3	53.7	54.0	54.6
IV 12000		24.4	27.4	32.6	41.5	43.5	46.6	52.5	54.5	55.3	55.7	55.9	55.9	56.4	56.6	57.2
≥ 10000		27.2	30.4	36.7	47.1	49.3	52.5	58.7	60.7	61.6	62.0	62.1	62.2	62.7	63.0	63.6
IV 9000		28.1	31.6	37.9	48.4	50.8	54.3	60.7	62.8	63.6	64.0	64.1	64.3	64.7	65.1	65.7
≥ 8000		29.5	33.2	39.9	50.4	52.9	56.4	62.9	65.0	65.8	66.2	66.3	66.4	66.9	67.3	67.9
IV 7000		30.8	34.5	41.4	52.2	54.8	58.3	65.0	67.0	67.9	68.2	68.4	68.5	69.0	69.3	69.9
≥ 6000		32.5	36.5	43.7	54.0	57.6	61.2	68.2	70.3	71.1	71.5	71.6	71.7	72.2	72.6	73.2
IV 5000		34.3	38.4	46.1	58.2	61.5	65.2	72.8	74.9	75.7	76.1	76.2	76.3	76.8	77.2	77.8
≥ 4500		35.6	39.7	47.9	60.1	63.6	67.5	75.1	77.2	78.0	78.4	78.5	78.6	79.1	79.5	80.1
IV 4000		37.2	41.7	50.0	62.7	66.5	70.5	78.1	80.2	81.0	81.4	81.5	81.6	82.1	82.5	83.1
≥ 3500		37.8	42.3	50.6	63.5	67.4	71.4	79.0	81.0	81.9	82.2	82.4	82.5	83.0	83.3	83.9
IV 3000		39.6	44.1	52.7	65.8	69.9	73.9	81.6	83.7	84.5	84.9	85.0	85.1	85.6	86.0	86.6
≥ 2500		40.8	45.4	54.5	67.8	71.9	75.8	83.7	85.7	86.6	87.0	87.1	87.2	87.7	88.0	88.6
IV 2000		42.0	46.6	55.7	69.1	73.2	77.2	85.3	87.4	88.3	88.6	88.8	88.9	89.4	89.7	90.3
≥ 1800		42.4	47.0	56.5	70.2	74.3	78.3	86.4	88.5	89.4	89.7	89.9	90.0	90.5	90.8	91.4
IV 1500		42.9	47.6	57.4	71.0	75.1	79.1	87.3	89.5	90.3	90.7	90.8	90.9	91.4	91.8	92.4
≥ 1200		43.0	47.7	57.6	71.5	75.6	79.6	88.0	90.2	91.1	91.4	91.5	91.7	92.1	92.5	93.1
IV 1000		43.0	47.7	57.6	71.6	76.0	80.0	88.4	90.6	91.4	91.8	91.9	92.0	92.5	92.9	93.5
≥ 900		43.0	47.7	57.6	71.6	76.0	80.0	88.4	90.6	91.4	91.8	91.9	92.0	92.5	92.9	93.5
IV 800		43.0	47.8	57.7	71.7	76.2	80.2	88.6	90.8	91.7	92.0	92.1	92.3	92.8	93.1	93.7
≥ 700		43.0	47.8	57.7	71.9	76.3	80.3	88.8	90.9	91.8	92.1	92.3	92.4	92.9	93.2	93.8
IV 600		43.0	47.8	58.0	72.2	76.7	80.7	89.1	91.4	92.3	92.6	92.7	92.9	93.4	93.7	94.3
≥ 500		43.0	47.8	58.0	72.3	76.9	81.0	89.9	92.1	93.1	93.5	93.6	93.7	94.2	94.6	95.2
IV 400		43.0	47.8	58.0	72.5	77.1	81.3	90.1	92.4	93.4	93.7	93.8	94.0	94.4	94.8	95.5
≥ 300		43.0	47.8	58.0	72.6	77.4	81.9	90.8	93.4	94.3	94.7	94.8	94.9	95.4	95.8	96.5
IV 200		43.0	47.8	58.0	72.6	77.4	81.9	90.8	93.7	94.8	95.2	95.3	95.4	95.9	96.3	97.3
≥ 100		43.0	47.8	58.0	72.6	77.4	81.9	90.8	93.7	94.8	95.2	95.4	95.5	96.1	96.5	98.7
IV 0		43.0	47.8	58.0	72.6	77.4	81.9	90.8	93.7	94.8	95.2	95.4	95.5	96.1	96.9	100.0

TOTAL NUMBER OF OBSERVATIONS 828

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032 RHEIN-MAIN APT GERMANY/FRANKFURT

67-76

SEP

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0600-1800
HOURS LST

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	¾	¾	¾	¾	≥5/16	≥¼
NO CEILING		15.8	18.7	23.1	29.5	30.9	34.4	38.5	40.3	41.0	41.4	41.4	41.5	41.6	41.7	42.2
≥ 20000		18.2	21.7	27.4	34.6	36.4	40.5	46.0	48.1	49.1	49.5	49.6	49.8	49.9	50.0	50.6
≥ 18000		18.2	21.8	27.5	34.7	36.5	40.6	46.1	48.2	49.2	49.6	49.8	49.9	50.0	50.1	50.7
≥ 16000		18.2	21.8	27.5	34.7	36.5	40.6	46.1	48.2	49.2	49.6	49.8	49.9	50.0	50.1	50.7
≥ 14000		18.4	21.9	27.7	35.1	36.8	41.1	46.6	48.7	49.6	50.1	50.2	50.4	50.5	50.6	51.2
≥ 12000		19.0	22.3	28.7	36.4	38.4	43.0	48.7	51.3	52.3	52.7	52.8	53.0	53.1	53.2	53.9
≥ 10000		20.9	24.6	31.5	40.4	42.7	47.6	54.1	56.9	57.8	58.3	58.4	58.5	58.6	58.8	59.5
≥ 9000		21.7	25.7	32.8	41.9	44.3	49.4	56.0	59.0	60.0	60.4	60.5	60.7	60.8	60.9	61.6
≥ 8000		22.7	26.8	34.0	44.1	46.9	52.3	59.0	62.1	63.0	63.5	63.6	63.7	63.9	64.0	64.7
≥ 7000		23.8	28.1	35.3	45.4	48.5	53.8	60.9	64.1	65.2	65.6	65.8	65.9	66.0	66.1	66.8
≥ 6000		25.2	29.5	37.3	48.1	51.3	56.8	63.9	67.2	68.4	68.8	69.0	69.1	69.2	69.3	70.0
≥ 5000		26.4	30.8	38.7	50.4	54.0	59.5	66.9	70.4	71.8	72.3	72.4	72.5	72.7	72.9	73.6
≥ 4500		26.9	31.3	39.6	51.2	55.1	60.7	68.2	71.9	73.5	73.9	74.1	74.2	74.4	74.5	75.2
≥ 4000		29.0	33.6	42.2	54.7	58.6	64.2	71.9	75.6	77.4	77.8	78.0	78.1	78.3	78.4	79.1
≥ 3500		29.6	34.4	43.2	56.0	60.0	65.5	73.2	76.9	78.7	79.1	79.3	79.4	79.6	79.7	80.5
≥ 3000		30.5	35.5	44.7	57.8	61.8	67.8	75.7	79.7	81.6	82.1	82.2	82.3	82.6	82.7	83.4
≥ 2500		31.8	37.1	46.4	60.0	64.0	70.0	78.3	82.3	84.2	84.7	84.8	85.0	85.2	85.3	86.0
≥ 2000		32.8	38.2	47.6	61.6	65.9	71.9	80.2	84.4	86.3	86.7	86.8	87.0	87.2	87.3	88.0
≥ 1800		32.9	38.3	47.9	62.0	66.2	72.3	80.6	84.7	86.6	87.1	87.2	87.3	87.6	87.7	88.4
≥ 1500		33.6	39.0	48.6	62.8	67.2	73.3	81.9	86.1	88.0	88.5	88.6	88.7	89.0	89.1	89.8
≥ 1200		33.6	39.0	48.9	63.4	67.9	74.2	82.9	87.2	89.1	89.6	89.7	89.8	90.0	90.2	90.9
≥ 1000		33.6	39.0	48.9	63.5	68.0	74.3	83.2	87.4	89.3	89.8	89.9	90.0	90.4	90.5	91.2
≥ 900		33.6	39.0	48.9	63.5	68.0	74.3	83.2	87.4	89.3	89.8	89.9	90.0	90.4	90.5	91.2
≥ 800		33.6	39.0	49.1	63.6	68.1	74.4	83.4	87.7	89.6	90.0	90.2	90.3	90.6	90.8	91.5
≥ 700		33.6	39.0	49.1	63.6	68.1	74.6	83.6	87.9	89.8	90.3	90.4	90.6	91.0	91.1	91.8
≥ 600		33.6	39.0	49.2	63.7	68.2	74.9	84.0	88.3	90.2	90.6	90.9	91.1	91.5	91.6	92.3
≥ 500		33.6	39.0	49.3	63.9	68.4	75.0	84.2	88.6	90.6	91.2	91.5	91.7	92.1	92.2	92.9
≥ 400		33.6	39.0	49.3	63.9	68.4	75.0	84.5	88.9	91.0	91.6	91.9	92.2	92.7	92.8	93.5
≥ 300		33.6	39.0	49.3	63.9	68.4	75.0	84.7	89.1	91.7	92.4	93.0	93.4	94.1	94.2	95.0
≥ 200		33.6	39.0	49.3	63.9	68.4	75.0	84.7	89.1	91.7	92.9	93.8	94.3	95.1	95.3	96.6
≥ 100		33.6	39.0	49.3	63.9	68.4	75.0	84.7	89.1	91.7	92.9	94.0	94.4	95.3	95.5	98.1
≥ 0		33.6	39.0	49.3	63.9	68.4	75.0	84.7	89.1	91.7	92.9	94.0	94.4	95.3	96.0	100.0

TOTAL NUMBER OF OBSERVATIONS 844

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35022 RHEIN-MAIN APT GERMANY/FRANKFURT 67-76

SEP

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0900-1100

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ .	≥ 0
NO CEILING		25.8	29.0	33.6	38.0	39.3	41.0	41.9	42.0	42.3	42.3	42.4	42.4	42.4	42.4	42.4
≥ 20000		31.2	35.1	41.0	47.3	48.3	50.7	51.9	52.1	52.4	52.4	52.4	52.5	52.5	52.5	52.5
≥ 18000		31.2	35.1	41.0	47.3	48.8	50.7	51.9	52.1	52.4	52.4	52.4	52.5	52.5	52.5	52.5
IV 16000		31.2	35.1	41.0	47.3	48.8	50.7	51.9	52.1	52.4	52.4	52.4	52.5	52.5	52.5	52.5
IV 14000		31.4	35.0	41.4	47.7	49.4	51.3	52.5	52.7	53.0	53.0	53.1	53.1	53.1	53.1	53.1
IV 12000		32.9	37.9	44.2	50.6	52.6	54.6	55.8	56.1	56.3	56.3	56.4	56.4	56.4	56.4	56.4
IV 10000		35.0	40.4	47.5	54.8	56.8	59.2	60.4	60.6	60.8	60.8	61.0	61.0	61.0	61.0	61.0
IV 9000		36.4	41.9	49.5	57.4	59.5	61.9	63.2	63.5	63.7	63.7	63.8	63.8	63.8	63.8	63.8
IV 8000		37.6	43.2	50.8	58.8	61.0	63.5	64.8	65.0	65.4	65.4	65.5	65.5	65.5	65.5	65.5
IV 7000		38.6	44.5	52.1	60.4	62.9	65.5	67.1	67.4	67.7	67.9	68.0	68.0	68.0	68.0	68.0
IV 6000		40.1	46.1	53.7	62.3	65.2	67.9	69.6	69.9	70.2	70.4	70.5	70.5	70.5	70.5	70.5
IV 5000		41.9	48.2	56.2	65.1	68.1	71.0	72.7	73.0	73.3	73.5	73.6	73.6	73.6	73.6	73.6
IV 4500		42.9	49.3	57.4	66.3	69.3	72.1	73.9	74.2	74.5	74.6	74.8	74.8	74.8	74.8	74.8
IV 4000		45.2	51.8	60.1	69.5	72.6	75.6	77.5	77.7	78.1	78.2	78.3	78.3	78.3	78.3	78.3
IV 3500		46.7	53.3	61.7	71.8	75.0	78.1	80.0	80.2	80.6	80.7	80.9	80.9	80.9	80.9	80.9
IV 3000		48.9	55.6	64.4	75.2	78.6	81.7	83.1	83.9	84.3	84.4	84.5	84.5	84.5	84.5	84.5
IV 2500		51.2	58.2	67.0	78.3	81.8	85.0	87.3	87.7	88.3	88.5	88.6	88.6	88.6	88.6	88.6
IV 2000		52.9	60.0	68.9	80.4	84.0	87.5	89.8	90.2	91.0	91.1	91.2	91.2	91.2	91.2	91.2
IV 1800		53.1	60.2	69.2	80.6	84.3	87.7	90.1	90.6	91.3	91.4	91.5	91.5	91.5	91.5	91.5
IV 1600		53.5	60.6	69.5	81.2	85.2	88.7	91.2	91.7	92.4	92.5	92.6	92.6	92.6	92.6	92.6
IV 1400		53.6	60.7	69.9	81.5	85.7	89.3	92.0	92.6	93.3	93.5	93.6	93.6	93.6	93.6	93.6
IV 1200		53.7	60.8	70.1	82.3	86.4	90.2	93.0	93.7	94.5	94.8	94.9	94.9	94.9	94.9	94.9
IV 1000		53.7	60.8	70.2	82.5	86.8	90.7	93.5	94.2	95.0	95.2	95.4	95.4	95.4	95.4	95.4
IV 900		53.7	60.8	70.2	82.6	87.0	91.0	93.7	94.4	95.2	95.5	95.6	95.6	95.6	95.6	95.6
IV 800		53.7	60.8	70.4	82.9	87.3	91.2	93.9	94.8	95.6	95.8	96.0	96.0	96.0	96.0	96.0
IV 700		53.7	60.8	70.5	83.1	87.6	91.8	94.6	95.5	96.3	96.5	96.7	96.7	96.7	96.7	96.7
IV 600		53.7	60.8	70.5	83.2	87.9	92.3	95.4	96.4	97.3	97.5	97.6	97.6	97.6	97.6	97.6
IV 500		53.7	60.8	70.5	83.3	88.0	92.4	95.5	96.5	97.5	97.9	98.0	98.0	98.0	98.0	98.0
IV 400		53.7	60.8	70.5	83.3	88.0	92.4	95.6	96.8	97.9	98.6	99.0	99.3	99.4	99.4	99.4
IV 300		53.7	60.8	70.5	83.3	88.0	92.4	95.6	96.8	97.9	98.6	99.0	99.3	99.4	99.4	99.4
IV 200		53.7	60.8	70.5	83.3	88.0	92.4	95.6	96.8	97.9	98.6	99.0	99.3	99.4	99.4	99.4
IV 100		53.7	60.8	70.5	83.3	88.0	92.4	95.6	96.8	97.9	98.6	99.0	99.3	99.4	99.4	99.4
IV 0		53.7	60.8	70.5	83.3	88.0	92.4	95.6	96.8	97.9	98.6	99.0	99.3	99.4	99.4	100.0

TOTAL NUMBER OF OBSERVATIONS 840

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/HAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

57-76
YEARS

SEP
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1200-1400
HOURS (LST)

CEILING (FEET)	VISIBILITY - STATUTE MILES															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥5/16	≥	≥0
NO CEILING ≥ 20000		35.4 43.7	37.5 46.1	39.7 48.8	42.1 51.7	42.8 52.5	43.0 52.6	43.0 52.7	43.0 52.7	43.0 52.7	43.0 52.7	43.0 52.7	43.0 52.7	43.0 52.7	43.0 52.7	43.0 52.7
≥ 18000 ≥ 16000		43.8 43.8	46.3 46.3	49.0 49.0	51.9 51.9	52.7 52.7	52.9 52.9	53.0 53.0	53.0 53.0	53.0 53.0	53.0 53.0	53.0 53.0	53.0 53.0	53.0 53.0	53.0 53.0	53.0 53.0
≥ 14000 ≥ 12000		44.4 47.1	46.9 49.6	49.8 52.9	52.6 56.2	53.5 57.0	52.6 57.2	53.7 57.2	53.7 57.3	53.7 57.3	53.7 57.3	53.7 57.3	53.7 57.3	53.7 57.3	53.7 57.3	53.7 57.3
≥ 10000 ≥ 9000		52.7 55.6	55.5 58.4	59.2 62.2	63.1 66.1	64.0 65.9	64.1 67.1	64.2 67.2	64.2 67.2	64.2 67.2	64.2 67.2	64.2 67.2	64.2 67.2	64.2 67.2	64.2 67.2	64.2 67.2
≥ 8000 ≥ 7000		56.8 59.4	59.7 62.4	63.5 66.3	67.5 70.4	68.4 71.2	68.6 71.5	68.7 71.7	68.7 71.7	68.7 71.7	68.7 71.7	68.7 71.7	68.7 71.7	68.7 71.7	68.7 71.7	68.7 71.7
≥ 6000 ≥ 5000		62.4 66.0	65.5 67.3	69.5 73.9	73.7 78.3	74.6 79.2	74.8 79.6	75.1 80.0	75.1 80.0	75.1 80.0	75.1 80.0	75.1 80.0	75.1 80.0	75.1 80.0	75.1 80.0	75.1 80.0
≥ 4500 ≥ 4000		67.8 72.2	71.6 76.1	76.1 81.0	80.7 85.7	81.6 86.6	82.0 87.0	82.6 87.8	82.6 87.8	82.6 87.8	82.6 87.8	82.6 87.8	82.6 87.8	82.6 87.8	82.6 87.8	82.6 87.8
≥ 3500 ≥ 3000		73.2 75.3	77.3 79.3	82.3 84.7	87.1 89.9	88.1 90.9	88.4 91.3	89.3 92.2	89.3 92.2	89.3 92.2	89.3 92.2	89.3 92.2	89.3 92.2	89.3 92.2	89.3 92.2	89.3 92.2
≥ 2500 ≥ 2000		76.8 78.4	81.3 82.9	86.5 88.4	91.8 94.0	93.0 95.2	93.3 95.6	94.3 96.5	94.3 96.5	94.3 96.5	94.3 96.5	94.3 96.5	94.3 96.5	94.3 96.5	94.3 96.5	94.3 96.5
≥ 1800 ≥ 1500		78.5 78.5	83.2 83.3	88.7 89.3	94.4 94.9	95.6 96.2	95.9 96.5	96.9 97.5	96.9 97.5	96.9 97.5	96.9 97.5	96.9 97.5	96.9 97.5	96.9 97.5	96.9 97.5	96.9 97.5
≥ 1200 ≥ 1000		78.5 78.5	83.3 83.3	89.1 89.3	95.5 95.7	97.0 97.4	97.2 98.1	98.4 99.0	98.4 99.0	98.4 99.0	98.4 99.0	98.4 99.0	98.4 99.0	98.4 99.0	98.4 99.0	98.4 99.0
≥ 900 ≥ 800		78.5 78.5	83.3 83.3	89.1 89.3	95.5 95.7	97.0 97.4	97.2 98.1	98.4 99.2	98.4 99.2	98.4 99.2	98.4 99.2	98.4 99.2	98.4 99.2	98.4 99.2	98.4 99.2	98.4 99.2
≥ 700 ≥ 600		78.5 78.5	83.3 83.3	89.1 89.3	95.5 95.7	97.0 97.4	97.2 98.1	98.4 99.2	98.4 99.2	98.4 99.2	98.4 99.2	98.4 99.2	98.4 99.2	98.4 99.2	98.4 99.2	98.4 99.2
≥ 500 ≥ 400		78.5 78.5	83.3 83.3	89.1 89.3	95.5 95.7	97.0 97.4	97.2 98.1	98.4 99.2	98.4 99.2	98.4 99.2	98.4 99.2	98.4 99.2	98.4 99.2	98.4 99.2	98.4 99.2	98.4 99.2
≥ 300 ≥ 200		78.5 78.5	83.3 83.3	89.1 89.3	95.5 95.7	97.0 97.4	97.2 98.1	98.4 99.2	98.4 99.2	98.4 99.2	98.4 99.2	98.4 99.2	98.4 99.2	98.4 99.2	98.4 99.2	98.4 99.2
≥ 100 0		78.5 78.5	83.3 83.3	89.1 89.3	95.5 95.7	97.0 97.4	97.2 98.1	98.4 99.2	98.4 99.2	98.4 99.2	98.4 99.2	98.4 99.2	98.4 99.2	98.4 99.2	98.4 99.2	98.4 99.2

TOTAL NUMBER OF OBSERVATIONS 838

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT 67-76
STATION NAME

SEP
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1500-1700
TIME

CEILING FEET	VISIBILITY STATUTE MILES															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥5/16	≥4/16	≥0
NO CEILING		40.2	40.9	42.6	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1
≥ 20000		50.6	51.9	54.0	55.9	55.9	55.9	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
≥ 18000		50.6	51.9	54.0	55.9	55.9	55.9	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
≥ 16000		50.6	51.9	54.0	55.9	55.9	55.9	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1
≥ 14000		51.6	52.9	55.2	57.1	57.2	57.2	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4
≥ 12000		55.4	56.7	59.1	60.9	61.1	61.1	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4
≥ 10000		59.9	61.4	64.1	66.4	66.5	66.6	67.2	67.2	67.2	67.2	67.2	67.2	67.2	67.2	67.2
≥ 9000		63.2	64.8	67.6	70.0	70.2	70.4	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9
≥ 8000		65.2	66.7	69.5	71.9	72.1	72.2	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8
≥ 7000		67.4	69.1	72.0	74.4	74.6	74.7	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3
≥ 6000		72.5	74.4	77.3	79.6	79.9	80.1	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7	80.7
≥ 5000		76.6	78.6	81.3	84.4	84.8	85.1	85.9	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0
≥ 4500		79.1	81.2	84.6	87.2	87.6	87.9	88.7	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8
≥ 4000		81.1	83.2	86.8	89.5	90.0	90.2	91.1	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3
≥ 3500		83.2	86.2	89.9	92.6	93.2	93.5	94.4	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6
≥ 3000		85.1	87.4	91.2	94.0	94.6	94.9	96.0	96.2	96.2	96.2	96.2	96.2	96.2	96.2	96.2
≥ 2500		86.2	88.7	92.8	95.6	96.2	96.7	97.8	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
≥ 2000		86.4	88.9	93.2	96.0	96.6	97.1	98.1	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4
≥ 1800		86.4	88.9	93.2	96.0	96.6	97.1	98.1	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4
≥ 1500		86.5	89.2	93.4	96.2	96.9	97.5	98.7	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
≥ 1200		86.5	89.3	93.5	96.4	97.1	97.6	98.1	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
≥ 1000		86.5	89.3	93.5	96.5	97.2	97.8	98.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 900		86.5	89.3	93.5	96.5	97.2	97.8	98.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 800		86.5	89.3	93.5	96.5	97.2	97.8	98.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 700		86.5	89.3	93.5	96.5	97.2	97.8	98.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 600		86.5	89.3	93.5	96.5	97.2	97.8	98.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
≥ 500		86.6	89.4	93.6	96.6	97.3	97.9	99.3	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 400		86.6	89.4	93.6	96.6	97.3	97.9	99.3	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 300		86.6	89.4	93.6	96.6	97.3	97.9	99.3	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 200		86.6	89.4	93.6	96.6	97.3	97.9	99.3	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 100		86.6	89.4	93.6	96.6	97.3	97.9	99.3	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
≥ 0		86.6	89.4	93.6	96.6	97.3	97.9	99.3	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8

TOTAL NUMBER OF OBSERVATIONS

850

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35022
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

57-76
YEARS

SE
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1200-2000
HOURS (LT)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥⅓	≥⅒	≥0
NO CEILING		36.6	38.5	41.2	44.1	44.8	45.2	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3	45.3
≥ 20000		46.8	49.1	52.6	56.2	57.1	57.7	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8
IV ≥ 18		47.0	49.2	52.7	56.2	57.2	57.8	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9
IV ≥ 16000		47.0	49.2	52.7	56.2	57.2	57.8	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9
IV ≥ 14000		47.6	49.8	53.3	57.0	57.9	58.5	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7	58.7
IV ≥ 12000		49.7	52.1	56.0	59.9	60.9	61.5	61.6	61.6	61.6	61.6	61.6	61.6	61.6	61.6	61.6
IV ≥ 10000		54.0	56.8	61.2	65.1	66.2	66.8	66.9	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0
IV ≥ 9000		56.5	59.4	63.9	68.0	69.1	69.7	69.8	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9
IV ≥ 8000		57.9	60.9	65.6	69.7	70.7	71.4	71.6	71.7	71.7	71.7	71.7	71.7	71.7	71.7	71.7
IV ≥ 7000		62.3	65.2	70.3	74.3	75.4	76.2	76.3	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5
IV ≥ 6000		67.0	70.4	75.6	79.9	81.0	81.8	82.0	82.1	82.1	82.1	82.1	82.1	82.1	82.1	82.1
IV ≥ 5000		71.1	74.5	80.0	84.9	86.3	87.2	87.3	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5
IV ≥ 4500		73.2	76.9	82.7	87.6	88.9	89.8	90.0	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1
IV ≥ 4000		75.5	79.3	85.2	90.7	92.1	93.1	93.3	93.4	93.5	93.5	93.5	93.5	93.5	93.5	93.5
IV ≥ 3500		76.5	80.4	86.3	91.9	93.3	94.3	94.5	94.6	94.7	94.7	94.7	94.7	94.7	94.7	94.7
IV ≥ 3000		78.0	82.0	87.8	93.4	94.9	95.8	96.1	96.2	96.3	96.3	96.3	96.3	96.3	96.3	96.3
IV ≥ 2500		78.5	82.4	88.4	94.0	95.5	96.4	97.0	97.1	97.3	97.3	97.3	97.3	97.3	97.3	97.3
IV ≥ 2000		79.0	82.9	88.9	94.5	96.1	97.0	97.6	97.7	97.8	97.8	97.8	97.8	97.8	97.8	97.8
IV ≥ 1800		79.1	83.0	89.0	94.6	96.2	97.1	97.8	98.0	98.1	98.1	98.1	98.1	98.1	98.1	98.1
IV ≥ 1500		79.1	83.2	89.2	95.0	96.5	97.6	98.3	98.4	98.6	98.6	98.6	98.6	98.6	98.6	98.6
IV ≥ 1200		79.1	83.2	89.3	95.2	96.8	97.8	98.4	98.7	98.8	98.8	98.8	98.8	98.8	98.8	98.8
IV ≥ 1000		79.1	83.2	89.3	95.3	97.0	98.1	98.8	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0
IV ≥ 900		79.1	83.2	89.3	95.3	97.0	98.1	98.8	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0
IV ≥ 800		79.1	83.2	89.3	95.3	97.0	98.1	98.8	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0
IV ≥ 700		79.2	83.3	89.6	95.6	97.3	98.3	99.0	99.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3
IV ≥ 600		79.2	83.3	89.6	95.6	97.3	98.4	99.2	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4
IV ≥ 500		79.2	83.3	89.7	95.7	97.4	98.6	99.3	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6
IV ≥ 400		79.2	83.3	89.7	95.7	97.4	98.6	99.4	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8
IV ≥ 300		79.2	83.3	89.7	95.7	97.4	98.6	99.4	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV ≥ 200		79.2	83.3	89.7	95.7	97.4	98.6	99.4	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV ≥ 100		79.2	83.3	89.7	95.7	97.4	98.6	99.4	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
IV ≥ 0		79.2	83.3	89.7	95.7	97.4	98.6	99.4	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

827

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

SEP
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

2100-2300
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥1/16	≥0	≥0
NO CEILING		36.4	39.7	45.0	51.0	52.6	53.7	54.2	54.2	54.3	54.3	54.3	54.5	54.5	54.5	54.5
≥ 20000		40.4	44.2	49.7	55.9	57.5	58.8	59.6	59.7	59.9	59.9	59.9	60.0	60.0	60.0	60.0
≥ 18000		40.6	44.4	49.9	56.2	57.8	59.0	59.9	60.0	60.1	60.1	60.1	60.2	60.2	60.2	60.2
≥ 16000		40.6	44.4	49.9	56.2	57.8	59.0	59.9	60.0	60.1	60.1	60.1	60.2	60.2	60.2	60.2
≥ 14000		40.6	44.6	50.3	56.5	58.1	59.4	60.2	60.3	60.5	60.5	60.5	60.6	60.6	60.6	60.6
≥ 12000		42.2	46.3	52.6	59.1	60.7	61.9	62.8	62.9	63.0	63.0	63.0	63.2	63.2	63.2	63.2
≥ 10000		45.8	50.1	57.5	64.1	66.0	67.3	68.2	68.3	68.4	68.4	68.4	68.5	68.5	68.5	68.5
≥ 9000		47.5	52.0	59.6	66.3	68.7	70.0	70.9	71.0	71.1	71.1	71.1	71.2	71.2	71.2	71.2
≥ 8000		50.4	55.1	62.7	69.9	72.2	73.6	74.4	74.5	74.7	74.7	74.7	74.8	74.8	74.8	74.8
≥ 7000		53.0	57.6	65.2	72.5	74.8	76.1	77.0	77.1	77.2	77.2	77.2	77.4	77.4	77.4	77.4
≥ 6000		57.6	62.3	70.4	78.0	80.3	81.6	82.5	82.6	82.7	82.7	82.7	82.9	82.9	82.9	82.9
≥ 5000		60.0	64.9	73.6	81.9	84.2	85.7	86.5	86.7	86.8	86.8	86.8	86.9	86.9	86.9	86.9
≥ 4500		61.1	66.2	74.9	83.2	85.6	87.0	87.9	88.0	88.1	88.1	88.1	88.2	88.2	88.2	88.2
≥ 4000		63.2	68.5	77.4	85.7	88.4	89.8	90.7	90.8	90.9	90.9	90.9	91.1	91.1	91.1	91.1
≥ 3500		64.7	70.1	79.1	87.5	90.2	91.7	92.5	92.7	92.8	92.8	92.8	92.9	92.9	92.9	92.9
≥ 3000		66.7	72.1	81.0	89.5	92.3	93.8	94.6	94.7	94.9	94.9	94.9	95.0	95.0	95.0	95.0
≥ 2500		66.8	72.2	81.3	90.0	92.9	94.4	95.3	95.5	95.6	95.6	95.6	95.7	95.7	95.7	95.7
≥ 2000		68.2	73.6	82.6	91.4	94.4	95.8	96.8	97.1	97.2	97.2	97.2	97.3	97.3	97.3	97.3
≥ 1800		68.4	73.8	82.9	91.7	94.6	96.1	97.1	97.3	97.4	97.4	97.4	97.6	97.6	97.6	97.6
≥ 1500		69.0	74.4	83.5	92.2	95.2	96.7	97.7	97.9	98.0	98.0	98.0	98.2	98.2	98.2	98.2
≥ 1200		69.5	74.9	84.0	92.8	95.7	97.2	98.2	98.4	98.8	98.8	98.8	98.9	98.9	98.9	98.9
≥ 1000		69.5	74.9	84.0	92.8	95.7	97.2	98.2	98.4	98.8	98.8	98.8	98.9	98.9	98.9	98.9
≥ 900		69.5	74.9	84.0	92.8	95.7	97.2	98.2	98.4	98.8	98.8	98.8	98.9	98.9	98.9	98.9
≥ 800		69.5	74.9	84.0	92.8	95.7	97.2	98.2	98.4	98.8	98.8	98.8	98.9	98.9	98.9	98.9
≥ 700		69.5	74.9	84.0	92.8	95.7	97.2	98.2	98.4	98.8	98.8	98.8	98.9	98.9	98.9	98.9
≥ 600		69.5	74.9	84.0	93.0	96.0	97.4	98.5	98.8	99.1	99.1	99.1	99.3	99.3	99.3	99.3
≥ 500		69.5	74.9	84.0	93.1	96.1	97.6	98.8	99.0	99.4	99.4	99.4	99.5	99.5	99.5	99.5
≥ 400		69.5	74.9	84.0	93.1	96.1	97.6	98.8	99.0	99.4	99.4	99.4	99.5	99.5	99.5	99.5
≥ 300		69.5	74.9	84.0	93.1	96.1	97.6	98.8	99.0	99.4	99.4	99.4	99.5	99.5	99.5	99.5
≥ 200		69.5	74.9	84.0	93.1	96.1	97.6	98.8	99.0	99.4	99.4	99.4	99.5	99.5	99.5	99.5
≥ 100		69.5	74.9	84.0	93.4	96.3	97.8	99.1	99.4	99.8	99.9	99.9	100.0	100.0	100.0	100.0
≥ 0		69.5	74.9	84.0	93.4	96.3	97.8	99.1	99.4	99.8	99.9	99.9	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

817

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032

RHEIN-MAIN APT GERMANY/FRANKFURT

57-76

DCI

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0000-0200
HOURS LST

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥1/16	≥0	≥0
NO CEILING		16.4	18.4	21.1	25.2	26.9	28.2	31.7	32.4	33.2	33.5	33.7	33.7	34.1	34.5	36.0
≥ 20000		17.9	20.0	23.0	28.3	30.4	31.9	35.5	36.2	37.0	37.3	37.5	37.5	37.9	38.3	39.8
≥ 18000		17.9	20.0	23.0	28.3	30.4	31.9	35.5	36.2	37.0	37.3	37.5	37.5	37.9	38.3	39.8
≥ 16000		17.9	20.0	23.0	28.3	30.4	31.9	35.5	36.2	37.0	37.3	37.5	37.5	37.9	38.3	39.8
≥ 14000		17.9	20.0	23.1	28.4	30.5	32.1	35.6	36.4	37.1	37.5	37.6	37.6	38.1	38.4	39.9
≥ 12000		18.4	20.6	23.9	29.1	31.2	32.9	36.5	37.2	38.1	38.4	38.6	38.6	39.0	39.4	40.9
≥ 10000		20.9	23.1	26.8	32.3	34.4	36.1	39.7	40.4	41.2	41.6	41.7	41.7	42.2	42.6	44.1
≥ 9000		22.2	24.7	28.8	34.3	36.4	38.1	41.6	42.4	43.2	43.6	43.7	43.7	44.2	44.6	46.0
≥ 8000		23.3	25.7	29.9	35.5	37.6	39.4	43.1	43.8	44.7	45.0	45.2	45.2	45.7	46.0	47.5
≥ 7000		24.7	27.2	31.3	37.6	39.8	41.6	45.4	46.1	47.1	47.5	47.6	47.6	48.1	48.5	49.9
≥ 6000		27.8	30.5	34.8	41.1	43.6	45.5	49.3	50.2	51.3	51.7	51.8	51.8	52.3	52.6	54.1
≥ 5000		30.6	33.5	38.4	45.0	47.6	49.7	53.5	54.3	55.6	55.9	56.1	56.1	56.5	56.9	58.5
≥ 4500		31.9	35.1	39.9	46.8	49.3	51.4	55.2	56.2	57.4	57.8	57.9	57.9	58.4	58.8	60.3
≥ 4000		33.3	36.7	42.7	49.9	52.8	55.0	59.0	60.0	61.3	61.7	61.8	61.8	62.3	62.7	64.3
≥ 3500		35.5	39.0	45.4	53.0	55.8	58.3	62.4	63.4	64.9	65.2	65.4	65.4	65.9	66.2	67.8
≥ 3000		38.8	42.6	49.0	56.8	59.7	62.3	66.6	67.6	69.0	69.4	69.5	69.5	70.0	70.4	72.0
≥ 2500		40.0	43.8	50.7	59.4	62.8	65.5	70.1	71.1	72.6	72.9	73.1	73.1	73.6	73.9	75.5
≥ 2000		42.7	46.9	54.2	64.0	67.4	70.1	74.9	75.9	77.4	77.7	77.8	77.8	78.3	78.7	80.3
≥ 1800		43.6	47.9	55.2	65.1	68.5	71.2	76.0	77.2	78.7	79.1	79.2	79.2	79.7	80.0	81.6
≥ 1500		44.3	49.1	56.9	67.6	71.4	74.1	78.8	80.2	81.6	82.0	82.1	82.1	82.6	83.0	84.6
≥ 1200		44.6	49.6	57.6	68.5	72.5	75.3	80.2	81.5	83.0	83.4	83.5	83.5	84.1	84.5	86.0
≥ 1000		44.9	50.1	58.4	69.9	73.8	76.6	81.8	83.1	84.6	84.9	85.1	85.1	85.7	86.0	87.6
≥ 900		44.9	50.1	58.4	70.0	73.9	76.7	82.0	83.4	84.8	85.2	85.3	85.3	85.9	86.3	87.9
≥ 800		44.9	50.1	58.6	70.3	74.2	77.0	82.4	83.7	85.2	85.6	85.7	85.7	86.3	86.7	88.2
≥ 700		44.9	50.1	58.8	70.5	74.4	77.2	82.6	84.0	85.6	85.9	86.0	86.0	86.7	87.0	88.6
≥ 600		45.0	50.2	59.0	70.7	74.7	77.6	83.0	84.3	86.0	86.4	86.5	86.5	87.1	87.5	89.1
≥ 500		45.0	50.3	59.2	71.4	75.3	78.6	84.0	85.3	87.0	87.4	87.5	87.5	88.1	88.5	90.1
≥ 400		45.0	50.3	59.4	71.5	75.4	78.7	84.2	85.6	87.3	87.6	87.8	87.8	88.4	88.7	90.3
≥ 300		45.0	50.3	59.4	71.6	75.6	79.1	85.2	87.0	89.0	89.5	89.6	89.6	90.2	90.7	92.3
≥ 200		45.0	50.3	59.4	71.7	75.8	79.2	85.4	87.3	89.4	89.8	90.1	90.1	90.8	91.3	93.3
≥ 100		45.0	50.3	59.4	71.7	75.8	79.2	85.4	87.3	89.6	90.1	90.3	90.3	91.3	91.8	95.2
≥ 0		45.0	50.3	59.4	71.7	75.8	79.2	85.4	87.3	89.6	90.2	90.6	90.6	91.7	92.4	100.0

TOTAL NUMBER OF OBSERVATIONS 817

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

JUL
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0300-0500
HOURS LST

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥16	≥1	≥0
NO CEILING		13.1	14.6	18.2	20.5	22.1	23.3	25.6	27.3	28.1	28.5	28.7	29.1	29.8	30.0	31.1
≥ 20000		14.2	15.8	19.9	23.2	24.8	26.4	28.7	30.4	31.2	31.6	31.9	32.2	32.9	33.1	34.2
≥ 18000		14.2	15.8	19.9	23.2	24.8	26.4	28.7	30.4	31.2	31.6	31.9	32.2	32.9	33.1	34.2
≥ 16000		14.2	15.8	19.9	23.2	24.8	26.4	28.7	30.4	31.2	31.6	31.9	32.2	32.9	33.1	34.2
≥ 14000		14.2	15.8	19.9	23.2	24.8	26.4	28.7	30.4	31.2	31.6	31.9	32.2	32.9	33.3	34.3
≥ 12000		14.6	16.6	21.0	24.2	26.2	27.9	30.5	32.2	33.0	33.4	33.6	34.0	34.7	34.9	36.0
≥ 10000		16.7	18.7	23.3	26.7	28.7	30.7	33.4	35.1	35.9	36.3	36.5	36.9	37.6	37.8	38.9
≥ 9000		16.9	19.0	23.5	26.9	28.9	31.0	33.6	35.3	36.1	36.5	36.7	37.1	37.8	38.1	39.1
≥ 8000		17.0	19.1	23.6	27.0	29.1	31.1	34.0	35.7	36.5	36.9	37.1	37.5	38.2	38.4	39.5
≥ 7000		17.9	20.2	25.0	28.9	31.0	33.0	35.9	37.6	38.4	38.8	39.0	39.4	40.1	40.3	41.4
≥ 6000		20.3	22.7	27.7	31.7	33.9	35.9	38.9	40.6	41.4	41.8	42.0	42.4	43.1	43.3	44.4
≥ 5000		23.4	26.2	31.5	35.8	38.3	40.5	43.6	45.3	46.2	46.6	46.8	47.2	47.9	48.1	49.2
≥ 4500		25.7	28.5	34.0	38.5	41.2	43.3	46.5	48.1	49.1	49.5	49.7	50.1	50.8	51.0	52.1
≥ 4000		27.5	30.5	36.7	41.7	44.4	46.8	49.9	51.6	52.7	53.1	53.3	53.7	54.4	54.6	55.7
≥ 3500		29.7	32.7	39.5	44.7	47.7	50.3	53.8	55.5	56.5	56.9	57.1	57.5	58.2	58.5	59.5
≥ 3000		33.1	36.1	43.3	49.1	52.2	54.9	58.3	60.0	61.1	61.5	61.7	62.2	62.9	63.1	64.3
≥ 2500		34.8	38.1	45.5	51.7	55.2	58.0	61.9	63.6	64.8	65.4	65.4	65.7	66.6	66.9	68.1
≥ 2000		37.6	40.9	49.1	56.2	59.8	62.8	66.7	68.4	69.6	70.0	70.2	70.7	71.4	71.7	72.9
≥ 1800		38.7	42.0	50.8	58.1	61.7	64.7	68.7	70.3	71.5	71.9	72.1	72.6	73.3	73.6	74.8
≥ 1500		39.9	43.5	53.1	61.2	65.3	68.3	72.3	73.9	75.3	75.6	75.9	76.4	77.1	77.3	78.5
≥ 1200		40.7	44.5	55.0	63.9	68.1	71.2	75.4	77.1	78.4	78.8	79.0	79.5	80.2	80.4	81.6
≥ 1000		40.8	44.8	55.3	64.9	69.3	72.4	76.7	78.4	79.7	80.1	80.4	80.9	81.6	81.9	83.1
≥ 900		40.8	44.8	55.3	64.9	69.3	72.4	76.7	78.4	79.7	80.1	80.4	80.9	81.6	81.9	83.1
≥ 800		40.9	44.9	55.6	65.3	69.6	72.7	77.1	78.8	80.2	80.6	80.9	81.4	82.1	82.4	83.6
≥ 700		40.9	45.0	55.8	65.7	70.1	73.2	77.6	79.2	80.7	81.0	81.4	81.9	82.6	82.8	84.0
≥ 600		40.9	45.0	55.8	65.8	70.5	73.7	78.0	79.8	81.3	81.6	82.0	82.5	83.2	83.4	84.6
≥ 500		40.9	45.0	55.8	66.0	70.8	74.1	78.4	80.2	81.8	82.1	82.5	83.0	83.7	83.9	85.1
≥ 400		40.9	45.0	55.9	66.4	71.3	74.7	79.2	81.0	83.0	83.3	83.7	84.2	84.9	85.1	86.3
≥ 300		40.9	45.0	55.9	66.5	71.5	75.3	80.3	82.6	84.9	85.4	85.7	86.3	87.2	87.5	88.7
≥ 200		40.9	45.0	55.9	66.5	71.5	75.4	80.7	83.3	86.2	86.7	87.0	87.6	88.6	89.0	90.8
≥ 100		40.9	45.0	55.9	66.5	71.5	75.4	80.7	83.3	86.4	86.9	87.3	87.9	89.4	90.0	94.5
≥ 0		40.9	45.0	55.9	66.5	71.5	75.4	80.7	83.3	86.4	86.9	87.3	87.9	89.7	90.4	100.0

TOTAL NUMBER OF OBSERVATIONS

833

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

07-76
YEARS

JCT
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0600-0800
HOURS CST

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ 1'	≥ 0
NO CEILING		6.9	8.6	11.5	15.4	16.7	18.4	21.2	22.3	23.2	23.6	23.8	24.1	24.3	24.4	25.0
≥ 20000		8.4	10.5	13.9	19.2	21.6	23.7	27.0	28.2	29.1	29.6	29.8	30.0	30.4	30.6	31.2
≥ 18000		8.4	10.5	13.9	19.3	21.7	23.8	27.2	28.3	29.2	29.7	29.9	30.1	30.5	30.7	31.3
≥ 16000		8.4	10.5	13.9	19.3	21.7	23.8	27.2	28.3	29.2	29.7	29.9	30.1	30.5	30.7	31.3
≥ 14000		8.6	10.7	14.4	19.9	22.3	24.5	28.2	29.3	30.3	30.7	31.0	31.2	31.5	31.8	32.3
≥ 12000		9.1	11.4	15.5	21.3	23.8	26.4	30.1	31.3	32.2	32.7	32.9	33.1	33.5	33.7	34.3
≥ 10000		10.4	12.9	17.1	23.0	25.8	28.4	32.2	33.4	34.3	34.8	35.0	35.2	35.6	35.8	36.4
≥ 9000		10.6	13.2	17.5	23.4	26.1	28.9	32.8	33.9	34.9	35.3	35.6	35.8	36.1	36.4	36.9
≥ 8000		10.9	13.7	18.1	24.2	27.0	29.9	33.8	35.0	35.9	36.4	36.6	36.8	37.2	37.4	38.0
≥ 7000		11.9	14.8	19.3	25.7	28.5	31.6	35.8	37.2	38.1	38.6	38.9	39.0	39.4	39.6	40.2
≥ 6000		13.3	16.7	21.9	28.8	32.0	35.3	39.5	40.9	41.8	42.2	42.5	42.7	43.2	43.4	44.0
≥ 5000		15.4	19.1	24.9	32.7	36.0	39.4	43.5	44.9	45.9	46.4	46.6	46.8	47.3	47.5	48.1
≥ 4500		16.7	20.5	26.4	34.6	38.0	41.7	46.4	47.8	48.8	49.3	49.5	49.7	50.2	50.4	51.0
≥ 4000		19.3	23.6	30.3	39.5	42.9	46.7	51.9	53.3	54.3	54.8	55.0	55.2	55.7	55.9	56.5
≥ 3500		21.3	25.7	32.6	42.7	46.1	50.2	55.6	57.0	58.0	58.5	58.7	58.9	59.4	59.6	60.2
≥ 3000		22.9	27.3	34.3	44.4	48.1	52.1	57.5	59.0	60.3	60.9	61.1	61.3	61.8	62.0	62.6
≥ 2500		24.7	29.2	36.5	47.0	50.6	55.0	60.5	62.0	63.5	64.1	64.3	64.6	65.0	65.2	65.8
≥ 2000		26.7	31.3	39.0	49.9	53.7	58.3	64.2	65.0	67.4	68.1	68.4	68.6	69.2	69.4	70.0
≥ 1800		27.2	31.9	40.0	51.2	55.1	59.8	65.9	67.5	69.2	69.9	70.1	70.3	70.9	71.1	71.7
≥ 1500		28.1	32.9	41.4	53.7	57.9	62.7	69.2	71.0	72.6	73.3	73.5	73.8	74.3	74.6	75.1
≥ 1200		28.4	33.0	42.5	55.8	60.0	65.1	71.7	73.6	75.3	76.1	76.3	76.5	77.1	77.3	77.9
≥ 1000		28.7	34.1	42.7	56.8	61.0	66.3	72.8	74.9	76.5	77.3	77.6	77.8	78.4	78.6	79.2
≥ 900		28.7	34.3	43.0	57.4	61.6	66.9	73.4	75.5	77.1	77.9	78.1	78.4	78.9	79.2	79.7
≥ 800		28.7	34.3	43.0	57.8	61.9	67.3	73.9	75.9	77.7	78.5	78.8	79.2	79.7	80.0	80.6
≥ 700		28.8	34.5	43.3	58.1	62.5	67.9	74.6	76.6	78.4	79.2	79.5	79.9	80.4	80.7	81.2
≥ 600		28.8	34.5	43.3	58.3	62.9	68.5	75.3	77.4	79.3	80.2	80.6	80.9	81.5	81.7	82.3
≥ 500		28.8	34.5	43.3	58.5	63.2	68.9	75.9	78.3	80.2	81.1	81.5	81.8	82.4	82.6	83.2
≥ 400		28.8	34.5	43.3	58.5	63.3	69.0	76.6	79.3	81.4	82.4	82.9	83.2	83.8	84.0	84.6
≥ 300		28.8	34.5	43.3	58.5	63.4	69.4	77.7	80.6	82.7	84.0	84.8	85.2	85.7	86.0	86.7
≥ 200		28.8	34.5	43.3	58.5	63.4	69.4	77.7	80.6	82.7	84.3	85.4	85.8	86.9	87.3	88.8
≥ 100		28.8	34.5	43.3	58.5	63.4	69.4	77.7	80.7	82.9	84.5	85.5	86.0	87.9	89.0	93.4
≥ 0		28.8	34.5	43.3	58.5	63.4	69.4	77.7	80.7	82.9	84.5	85.5	86.0	89.3	90.7	100.0

TOTAL NUMBER OF OBSERVATIONS

869

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT

67-76

UCI

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1900-1100
HOURS LST

CEILING (FEET)	VISIBILITY (STATUTE MILES)																
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/8	≥ 1/16	≥ 1/32	≥ 0
NO CEILING		15.6	16.5	18.4	23.3	24.3	26.2	27.1	27.8	28.1	28.4	28.4	28.4	28.4	28.5	28.5	28.5
≥ 20000		19.3	21.0	23.8	30.3	31.6	33.6	34.9	35.7	35.9	36.3	36.3	36.3	36.4	36.4	36.4	36.4
IV 18000		19.3	21.0	23.8	30.3	31.6	33.6	34.9	35.7	35.9	36.3	36.3	36.3	36.4	36.4	36.4	36.4
IV 16000		19.3	21.0	23.8	30.3	31.6	33.6	34.9	35.7	35.9	36.3	36.3	36.3	36.4	36.4	36.4	36.4
IV 14000		19.7	21.6	24.4	30.9	32.2	34.2	35.5	36.3	36.5	36.8	36.8	36.8	36.9	36.9	36.9	36.9
IV 12000		21.4	23.3	26.2	33.0	34.2	36.3	37.5	38.3	38.5	38.9	38.9	39.0	39.1	39.1	39.1	39.1
IV 10000		22.5	24.3	27.6	34.3	35.7	37.7	39.1	39.9	40.1	40.5	40.5	40.6	40.7	40.7	40.7	40.7
IV 9000		23.4	25.2	28.5	35.2	36.7	38.8	40.1	40.9	41.2	41.5	41.5	41.6	41.7	41.7	41.7	41.7
IV 8000		23.8	25.7	29.1	35.9	37.5	39.7	41.2	42.0	42.2	42.5	42.5	42.6	42.8	42.8	42.8	42.8
IV 7000		25.4	27.3	30.7	37.7	39.6	42.1	43.7	44.5	44.7	45.0	45.2	45.3	45.4	45.4	45.4	45.4
IV 6000		28.4	30.4	34.2	41.4	43.3	46.0	47.5	48.3	48.7	49.0	49.1	49.3	49.4	49.4	49.4	49.4
IV 5000		30.6	32.1	37.1	44.7	47.0	49.7	51.7	52.5	52.8	53.1	53.2	53.4	53.5	53.5	53.5	53.5
IV 4500		32.2	35.1	39.3	47.4	49.7	52.8	54.7	55.5	55.9	56.3	56.4	56.6	56.7	56.7	56.7	56.7
IV 4000		34.2	37.7	42.3	51.0	53.8	57.2	59.3	60.2	60.7	61.1	61.2	61.3	61.5	61.5	61.5	61.5
IV 3500		35.9	39.8	44.6	53.5	56.6	60.1	62.3	63.2	63.6	64.1	64.2	64.3	64.4	64.4	64.4	64.4
IV 3000		37.9	42.2	47.5	56.9	60.2	63.7	66.5	67.4	67.8	68.3	68.5	68.9	69.0	69.0	69.0	69.0
IV 2500		40.1	44.6	50.6	60.4	63.7	67.5	70.5	71.4	72.1	72.5	72.7	73.1	73.2	73.2	73.2	73.2
IV 2000		41.5	46.1	52.7	63.1	66.5	70.2	73.4	74.5	75.1	75.6	75.7	76.2	76.3	76.3	76.3	76.3
IV 1800		42.9	47.8	54.5	65.5	68.9	72.6	75.8	76.9	77.5	78.0	78.2	78.6	78.7	78.7	78.7	78.7
IV 1500		43.8	49.0	56.7	68.1	71.6	75.4	78.7	79.7	80.4	80.8	81.1	81.4	81.5	81.5	81.5	81.5
IV 1200		44.2	49.7	57.7	70.4	74.3	78.7	82.1	83.1	83.9	84.4	84.6	84.9	85.1	85.1	85.1	85.1
IV 1000		44.4	49.8	58.0	71.2	75.1	79.5	83.0	84.0	84.8	85.3	85.4	85.6	86.0	86.1	86.1	86.1
IV 900		44.4	49.8	58.0	71.2	75.1	79.5	83.0	84.2	84.9	85.4	85.7	86.1	86.2	86.2	86.2	86.2
IV 800		44.4	49.8	58.2	71.5	75.5	79.8	83.4	84.5	85.3	85.7	86.2	86.5	86.7	86.7	86.7	86.7
IV 700		44.4	49.9	58.3	71.8	75.8	80.3	83.9	85.2	86.0	86.4	87.0	87.3	87.5	87.5	87.5	87.5
IV 600		44.4	49.9	58.3	71.9	76.1	80.5	84.3	85.5	86.2	86.8	87.5	87.8	87.9	87.9	87.9	87.9
IV 500		44.4	49.9	58.4	72.2	76.3	81.0	85.7	87.2	88.1	88.8	89.5	89.9	90.0	90.0	90.0	90.0
IV 400		44.4	49.9	58.4	72.2	76.3	81.0	86.0	87.9	89.3	90.2	91.0	91.3	91.4	91.4	91.4	91.4
IV 300		44.4	49.9	58.4	72.2	76.3	81.1	86.5	88.6	90.4	91.8	93.2	93.8	94.1	94.1	94.2	94.2
IV 200		44.4	49.9	58.4	72.2	76.3	81.1	86.5	88.6	90.4	91.9	93.5	94.6	95.1	95.3	95.6	95.6
IV 100		44.4	49.9	58.4	72.2	76.3	81.1	86.5	88.6	90.4	91.9	93.5	94.8	95.6	96.0	97.0	97.0
IV 0		44.4	49.9	58.4	72.2	76.3	81.1	86.5	88.6	90.4	91.9	93.6	95.2	96.9	97.6	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

877

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

JCT
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1200-1400
HOURS (LST)

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 16	≥ 1	≥ 0
NO CEILING		23.6	25.3	27.7	29.8	30.6	31.5	33.1	33.1	33.3	33.4	33.4	33.4	33.4	33.4	33.4
≥ 20000		29.7	31.7	35.1	37.8	38.7	39.7	41.8	41.8	42.1	42.2	42.2	42.2	42.2	42.2	42.2
IV 18000		29.8	31.9	35.2	37.9	38.8	39.9	41.9	41.9	42.2	42.3	42.3	42.3	42.3	42.3	42.3
IV 16000		29.8	31.9	35.2	37.9	38.8	39.9	41.9	41.9	42.2	42.3	42.3	42.3	42.3	42.3	42.3
IV 14000		30.0	32.1	35.5	38.1	39.0	40.1	42.2	42.2	42.4	42.5	42.5	42.5	42.5	42.5	42.5
IV 12000		32.8	35.1	38.6	41.4	42.3	43.3	45.4	45.4	45.7	45.8	45.8	45.8	45.8	45.8	45.8
IV 10000		35.3	37.7	41.3	44.5	45.5	46.6	48.7	48.7	48.9	49.0	49.0	49.0	49.0	49.0	49.0
IV 9000		36.4	38.8	42.6	45.9	46.9	48.3	50.6	50.6	50.9	51.0	51.0	51.0	51.0	51.0	51.0
IV 8000		36.7	39.2	43.0	46.3	47.4	49.0	51.4	51.4	51.7	51.8	51.8	51.8	51.8	51.8	51.8
IV 7000		38.2	40.7	44.5	47.9	48.9	50.5	53.0	53.0	53.2	53.3	53.3	53.3	53.3	53.3	53.3
IV 6000		41.8	44.4	48.2	51.6	52.6	54.2	56.7	56.7	57.0	57.1	57.1	57.1	57.1	57.1	57.1
IV 5000		45.0	47.6	51.4	55.0	56.1	57.9	60.4	60.4	60.7	60.8	60.8	60.8	60.8	60.8	60.8
IV 4500		46.2	49.0	52.8	56.4	57.6	59.6	62.0	62.1	62.5	62.6	62.6	62.6	62.6	62.6	62.6
IV 4000		48.7	51.4	56.1	60.0	61.2	63.4	65.8	65.9	66.3	66.4	66.4	66.4	66.4	66.4	66.4
IV 3500		51.6	54.3	59.2	63.7	65.1	67.3	69.8	69.9	70.2	70.3	70.3	70.3	70.3	70.3	70.3
IV 3000		55.2	58.1	63.7	68.3	69.6	71.8	74.5	74.6	75.0	75.1	75.1	75.1	75.1	75.1	75.1
IV 2500		57.9	60.8	67.0	71.6	73.0	75.4	78.2	78.3	78.8	78.9	78.9	78.9	78.9	78.9	78.9
IV 2000		60.1	63.3	70.2	75.7	77.2	79.6	82.4	82.5	83.0	83.1	83.1	83.1	83.1	83.1	83.1
IV 1800		61.4	64.5	71.6	77.3	78.8	81.2	84.2	84.4	84.8	85.1	85.1	85.1	85.1	85.1	85.1
IV 1500		63.3	67.1	74.6	80.8	82.5	84.9	88.2	88.3	88.8	89.0	89.0	89.0	89.0	89.0	89.0
IV 1200		64.2	68.1	75.8	82.0	83.9	86.4	89.9	90.0	90.5	90.7	90.7	90.7	90.7	90.7	90.7
IV 1000		64.2	68.3	76.1	82.5	84.5	87.0	90.8	91.0	91.4	91.7	91.7	91.7	91.7	91.7	91.7
IV 900		64.2	68.3	76.1	82.7	84.8	87.4	91.2	91.3	91.8	92.1	92.1	92.1	92.1	92.1	92.1
IV 800		64.2	68.3	76.1	83.0	85.1	87.7	91.5	91.7	92.2	92.6	92.6	92.7	92.7	92.7	92.7
IV 700		64.3	68.4	76.2	83.1	85.2	87.8	92.0	92.1	92.8	93.2	93.2	93.3	93.3	93.3	93.3
IV 600		64.3	68.4	76.4	83.3	85.4	88.1	92.2	92.5	93.3	93.7	93.7	93.9	93.9	93.9	93.9
IV 500		64.3	68.4	76.4	83.3	85.5	88.2	92.6	93.0	94.2	94.7	94.9	95.1	95.1	95.1	95.1
IV 400		64.3	68.4	76.4	83.3	85.5	88.2	92.7	93.3	94.8	95.6	95.9	96.2	96.2	96.2	96.2
IV 300		64.3	68.4	76.4	83.3	85.5	88.3	92.9	93.7	95.7	97.1	97.8	98.0	98.5	98.5	98.5
IV 200		64.3	68.4	76.4	83.3	85.5	88.3	92.9	93.7	95.7	97.1	98.0	99.1	99.2	99.3	99.3
IV 100		64.3	68.4	76.4	83.3	85.5	88.3	92.9	93.7	95.7	97.1	98.0	99.1	99.2	99.3	99.3
IV 0		64.3	68.4	76.4	83.3	85.5	88.3	92.9	93.7	95.7	97.1	98.0	99.4	99.9	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS

863

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

2

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032

RHEIN-MAIN APT GERMANY/FRANKFURT

67-76

JCT

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1500-1700
HOURS LST

CEILING (FEET)	VISIBILITY STATUTE MILES															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥⅓	≥⅒	≥0
NO CEILING		22.7	24.1	26.3	28.3	29.3	30.4	32.4	33.3	33.6	33.9	34.0	34.0	34.0	34.0	34.1
≥ 20000		30.7	32.3	35.0	37.6	39.0	40.7	42.5	44.7	45.3	45.7	45.9	45.9	45.9	45.9	46.0
≥ 18000		30.9	32.5	35.2	37.9	39.2	41.0	43.7	45.0	45.5	45.9	46.1	46.1	46.1	46.1	46.2
≥ 16000		30.9	32.5	35.2	37.9	39.2	41.0	43.7	45.0	45.5	45.9	46.1	46.1	46.1	46.1	46.2
≥ 14000		31.5	33.2	35.9	38.6	39.9	41.6	44.4	45.7	46.2	46.6	46.9	46.8	46.8	46.8	46.9
≥ 12000		34.7	36.5	39.7	42.3	43.7	45.4	48.2	49.4	50.0	50.3	50.6	50.6	50.6	50.6	50.7
≥ 10000		38.0	40.4	43.9	46.7	48.1	49.8	52.5	53.9	54.5	54.8	55.0	55.0	55.0	55.0	55.1
≥ 9000		39.2	41.9	45.8	48.6	50.2	52.1	54.8	56.2	56.8	57.1	57.3	57.3	57.3	57.3	57.4
≥ 8000		39.6	42.2	46.1	49.0	50.6	52.5	55.3	56.6	57.2	57.6	57.8	57.8	57.8	57.8	57.9
≥ 7000		41.0	43.6	47.6	50.5	52.1	54.2	57.1	58.5	59.0	59.4	59.6	59.6	59.6	59.6	59.7
≥ 6000		43.5	46.2	50.5	53.3	54.9	57.1	60.1	61.6	62.2	62.6	62.8	62.8	62.8	62.8	62.9
≥ 5000		47.5	50.6	54.9	58.1	59.7	62.0	65.1	66.6	67.3	67.8	67.8	67.8	67.8	67.8	68.0
≥ 4500		49.1	52.4	57.0	60.2	61.9	64.3	67.4	68.9	69.6	69.9	70.1	70.1	70.1	70.1	70.3
≥ 4000		52.3	55.6	60.4	64.2	66.0	68.8	71.9	73.3	74.0	74.4	74.6	74.6	74.6	74.6	74.7
≥ 3500		54.8	58.2	63.4	67.2	69.0	71.9	74.9	76.4	77.1	77.5	77.7	77.7	77.7	77.7	77.8
≥ 3000		57.0	60.6	65.9	70.3	72.1	75.3	78.7	80.2	80.9	81.2	81.5	81.5	81.5	81.5	81.6
≥ 2500		59.0	63.3	68.9	73.3	75.5	78.7	82.2	83.6	84.3	84.7	84.9	84.9	84.9	84.9	85.0
≥ 2000		60.6	65.1	71.3	76.3	78.7	81.9	85.6	87.1	87.8	88.1	88.3	88.3	88.3	88.3	88.4
≥ 1800		61.3	66.0	72.2	77.3	79.7	83.0	86.6	88.1	88.8	89.1	89.4	89.4	89.4	89.4	89.5
≥ 1500		62.1	66.9	74.0	79.2	81.6	84.9	88.6	90.2	90.8	91.2	91.4	91.4	91.4	91.4	91.5
≥ 1200		62.9	67.8	75.3	80.8	83.2	86.7	90.6	92.2	92.9	93.2	93.5	93.5	93.5	93.5	93.6
≥ 1000		62.9	67.8	75.4	81.0	83.4	87.1	91.0	92.6	93.4	93.7	93.9	94.1	94.1	94.1	94.2
≥ 900		62.9	68.1	75.7	81.5	84.1	87.8	91.8	93.4	94.2	94.5	94.7	94.9	94.9	94.9	95.0
≥ 800		62.9	68.1	75.7	81.6	84.2	87.9	92.2	93.8	94.6	95.0	95.2	95.3	95.3	95.3	95.4
≥ 700		62.9	68.1	75.7	81.6	84.3	88.0	92.3	93.9	94.7	95.1	95.3	95.4	95.4	95.4	95.5
≥ 600		62.9	68.1	75.7	81.6	84.3	88.1	92.6	94.3	95.1	95.4	95.7	95.8	95.8	95.8	95.9
≥ 500		62.9	68.1	75.7	81.6	84.3	88.2	92.8	94.5	95.4	95.9	96.2	96.3	96.3	96.3	96.5
≥ 400		62.9	68.1	75.7	81.6	84.3	88.2	92.9	94.6	95.7	96.3	96.8	96.9	96.9	96.9	97.0
≥ 300		62.9	68.1	75.7	81.6	84.3	88.2	93.0	94.9	95.9	97.1	97.6	97.8	97.9	97.9	98.1
≥ 200		62.9	68.1	75.7	81.6	84.3	88.2	93.0	94.9	95.9	97.3	98.1	98.3	98.6	98.6	98.7
≥ 100		62.9	68.1	75.7	81.6	84.3	88.2	93.0	94.9	95.9	97.3	98.2	98.5	99.0	99.0	99.1
≥ 0		62.9	68.1	75.7	81.6	84.3	88.2	93.0	94.9	95.9	97.3	98.2	98.5	99.3	99.4	100.0

TOTAL NUMBER OF OBSERVATIONS 874

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

JCT
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1800-2000
HOURS 15°

CEILING (FEET)	VISIBILITY (STATUTE MILES)																
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥¾	≥½	≥¼	≥1/16	≥1/8	≥0
NO CEILING		25.0	26.6	29.8	32.7	33.6	34.8	37.6	38.7	39.1	39.2	39.2	39.2	39.4	39.4	39.7	
≥ 20000		29.9	31.7	35.2	39.0	40.0	41.5	44.7	46.0	45.4	46.6	46.6	46.6	46.8	46.8	47.0	
IV 18000		30.0	31.9	35.4	39.1	40.1	41.7	44.8	46.1	46.6	46.7	46.7	46.7	46.9	46.9	47.1	
IV 16000		30.0	31.9	35.4	39.1	40.1	41.7	44.8	46.1	46.6	46.7	46.7	46.7	46.9	46.9	47.1	
IV 14000		30.9	32.8	36.3	40.0	41.1	42.6	45.7	47.0	47.5	47.6	47.6	47.6	47.8	47.8	48.1	
IV 12000		34.3	36.2	39.8	43.5	44.6	46.1	49.2	50.5	51.0	51.1	51.1	51.1	51.3	51.3	51.6	
IV 10000		37.3	39.3	43.5	47.7	48.8	50.4	53.6	54.8	55.3	55.4	55.4	55.4	55.7	55.7	55.9	
IV 9000		37.8	39.8	44.0	48.3	49.4	51.0	54.1	55.4	55.9	56.0	56.0	56.0	56.2	56.2	56.5	
IV 8000		38.9	41.0	45.5	50.3	51.3	53.0	56.1	57.4	57.9	58.0	58.0	58.0	58.2	58.2	58.5	
IV 7000		41.0	43.2	47.8	52.6	53.7	55.3	58.5	59.7	60.2	60.3	60.3	60.3	60.6	60.6	60.8	
IV 6000		43.3	45.7	50.5	55.3	56.4	58.0	61.6	62.9	63.4	63.5	63.5	63.5	63.7	63.8	64.2	
IV 5000		47.5	50.1	55.2	60.1	61.1	62.8	66.5	67.8	68.3	68.4	68.4	68.4	68.6	68.7	69.1	
IV 4500		50.2	53.1	58.2	63.5	64.5	66.5	70.2	71.5	72.0	72.1	72.1	72.1	72.3	72.5	72.8	
IV 4000		51.8	54.8	60.3	65.9	67.0	69.0	72.7	74.0	74.4	74.6	74.6	74.6	74.8	74.9	75.3	
IV 3500		53.7	56.7	62.5	68.5	69.5	71.6	75.4	76.7	77.1	77.2	77.2	77.2	77.5	77.6	77.9	
IV 3000		56.4	59.9	65.8	72.2	73.4	75.8	79.7	81.0	81.4	81.6	81.6	81.6	81.8	81.9	82.3	
IV 2500		58.0	61.6	67.8	74.3	75.7	78.3	82.1	83.4	83.9	84.0	84.0	84.0	84.2	84.4	84.7	
IV 2000		60.0	63.9	70.9	78.1	79.6	82.1	86.2	87.5	88.0	88.1	88.1	88.1	88.3	88.4	88.8	
IV 1800		60.3	64.3	71.5	78.8	80.3	82.8	86.9	88.2	88.7	88.8	88.8	88.8	89.0	89.1	89.5	
IV 1500		60.8	65.1	72.6	80.0	81.6	84.1	88.3	89.6	90.1	90.2	90.2	90.2	90.4	90.5	90.9	
IV 1200		61.4	66.0	73.9	81.7	83.2	85.9	90.2	91.5	91.9	92.1	92.1	92.1	92.3	92.4	92.8	
IV 1000		61.5	66.2	74.1	81.9	83.4	86.3	90.7	91.9	92.4	92.5	92.5	92.5	92.8	92.9	93.2	
IV 900		61.5	66.2	74.2	82.0	83.5	86.5	90.8	92.1	92.5	92.6	92.6	92.6	92.9	93.0	93.3	
IV 800		61.5	66.2	74.3	82.1	83.7	86.6	91.0	92.3	92.8	92.9	92.9	92.9	93.1	93.2	93.6	
IV 700		61.5	66.2	74.3	82.4	83.9	86.8	91.2	92.5	93.0	93.1	93.1	93.1	93.3	93.5	93.8	
IV 600		61.5	66.2	74.3	82.5	84.1	87.0	91.6	92.9	93.3	93.5	93.5	93.5	93.7	93.8	94.2	
IV 500		61.5	66.2	74.3	82.5	84.1	87.0	91.8	93.1	93.7	93.9	93.9	93.9	94.2	94.3	94.6	
IV 400		61.5	66.2	74.3	82.5	84.1	87.0	92.2	93.5	94.2	94.4	94.4	94.4	94.6	94.7	95.1	
IV 300		61.5	66.2	74.3	82.5	84.1	87.0	92.5	93.9	95.0	95.4	95.4	95.4	95.8	95.9	96.3	
IV 200		61.5	66.2	74.3	82.5	84.1	87.0	92.5	93.9	95.1	95.6	95.7	95.7	96.0	96.3	96.6	
IV 100		61.5	66.2	74.3	82.5	84.1	87.0	92.5	93.9	95.1	95.7	95.8	95.9	96.4	96.7	97.4	
IV 0		61.5	66.2	74.3	82.5	84.1	87.0	92.5	93.9	95.1	95.7	95.8	95.9	96.5	97.0	100.0	

TOTAL NUMBER OF OBSERVATIONS

857

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032

RHEIN-HAIN APT GERMANY/FRANKFURT

67-76

301

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

2100-300
HOURS 1-57

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/8	≥ 1/16	≥ 1/32	≥ 0
NO CEILING		18.1	20.1	23.8	29.1	29.4	30.5	33.4	34.5	35.8	36.4	36.6	36.7	36.8	37.1	37.7
≥ 20000		20.4	22.7	27.0	31.8	33.2	34.5	37.6	38.6	39.9	40.5	40.9	41.0	41.1	41.4	41.9
≥ 18000		20.5	22.9	27.1	31.9	33.3	34.6	37.7	38.7	40.0	40.6	41.0	41.1	41.2	41.5	42.1
≥ 16000		20.5	22.9	27.1	31.9	33.3	34.6	37.7	38.7	40.0	40.6	41.0	41.1	41.2	41.5	42.1
≥ 14000		20.9	23.2	27.5	32.2	33.6	35.0	38.7	39.1	40.4	41.0	41.4	41.5	41.6	41.8	42.4
≥ 12000		22.5	24.9	29.1	34.1	35.7	37.0	40.0	41.4	42.7	43.2	43.6	43.7	43.8	44.1	44.7
≥ 10000		25.2	27.8	32.5	38.0	39.6	40.9	44.1	45.4	46.7	47.3	47.6	47.7	47.9	48.1	48.7
≥ 9000		26.2	28.8	34.0	39.7	41.2	42.5	45.7	47.0	48.3	48.9	49.3	49.4	49.5	49.8	50.4
≥ 8000		27.5	30.2	35.4	41.4	42.9	44.2	47.4	48.7	50.0	50.6	50.9	51.1	51.2	51.4	52.0
≥ 7000		29.7	32.6	37.8	43.8	45.4	46.7	49.9	51.2	52.5	53.1	53.4	53.6	53.7	53.9	54.5
≥ 6000		33.1	36.0	41.7	48.0	49.8	51.1	54.5	56.0	57.3	58.2	58.5	58.6	58.8	59.0	59.6
≥ 5000		35.9	39.2	44.9	51.3	53.1	54.4	57.9	59.5	60.8	61.6	62.0	62.1	62.4	62.8	63.4
≥ 4500		37.6	41.7	47.6	54.1	55.9	57.2	61.0	62.7	64.0	64.8	65.2	65.3	65.4	66.0	66.6
≥ 4000		41.8	46.1	52.3	59.7	61.6	63.0	66.9	68.6	69.9	70.7	71.1	71.2	71.6	71.9	72.5
≥ 3500		44.4	48.8	55.0	62.8	64.9	66.7	70.7	72.4	73.7	74.5	74.9	75.0	75.4	75.7	76.3
≥ 3000		47.7	52.3	59.2	67.1	69.2	71.1	75.6	77.3	78.6	79.4	79.7	79.9	80.2	80.6	81.2
≥ 2500		48.9	53.6	61.0	70.1	72.3	74.2	78.7	80.3	81.6	82.5	82.8	82.9	83.3	83.6	84.2
≥ 2000		50.5	55.3	63.0	72.6	74.8	76.7	81.3	82.9	84.2	85.1	85.4	85.5	85.9	86.3	86.8
≥ 1800		50.9	55.9	63.9	73.5	75.6	77.5	82.2	83.9	85.2	86.0	86.4	86.5	86.8	87.2	87.8
≥ 1500		51.3	56.5	64.7	74.6	76.9	78.8	83.5	85.3	86.7	87.6	87.9	88.0	88.4	88.7	89.3
≥ 1200		51.7	57.1	65.5	76.2	78.4	80.3	85.1	86.8	88.3	89.1	89.5	89.6	89.9	90.3	90.9
≥ 1000		51.7	57.1	65.6	76.3	78.6	80.5	85.2	87.0	88.4	89.2	89.6	89.7	90.0	90.4	91.0
≥ 900		51.7	57.1	65.8	76.7	79.0	81.0	85.8	87.6	89.0	89.8	90.2	90.3	90.6	91.0	91.6
≥ 800		51.7	57.1	66.0	76.9	79.3	81.4	86.1	87.9	89.3	90.2	90.5	90.6	91.0	91.4	91.9
≥ 700		51.7	57.1	66.0	77.0	79.4	81.5	86.3	88.0	89.5	90.3	90.6	90.8	91.1	91.5	92.1
≥ 600		51.7	57.1	66.0	77.3	79.6	81.8	86.5	88.3	89.7	90.5	90.9	91.0	91.4	91.7	92.3
≥ 500		51.7	57.1	66.0	77.3	79.6	81.8	86.6	88.4	89.9	90.8	91.1	91.2	91.6	91.9	92.5
≥ 400		51.7	57.1	66.0	77.3	79.7	82.0	86.8	88.9	90.4	91.2	91.4	91.7	92.1	92.4	93.0
≥ 300		51.7	57.1	66.0	77.3	79.9	82.3	87.6	90.3	92.1	92.9	93.5	93.6	94.0	94.3	94.9
≥ 200		51.7	57.1	66.1	77.4	80.0	82.5	87.9	90.8	92.7	93.5	94.2	94.3	94.7	95.0	95.7
≥ 100		51.7	57.1	66.1	77.4	80.0	82.5	87.9	90.8	92.7	93.5	94.2	94.3	94.7	95.0	96.7
≥ 0		51.7	57.1	66.1	77.4	80.0	82.5	87.9	90.8	92.7	93.5	94.2	94.3	94.8	95.3	100.0

TOTAL NUMBER OF OBSERVATIONS 844

2

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATIONRHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME67-76
YEARSNOV
MONTHPERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)0000-0200
HOURS

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥10	≥½	≥0
NO CEILING		15.2	17.4	20.4	22.9	24.1	24.5	26.0	27.2	27.4	27.6	27.6	27.8	27.9	27.9	28.4
≥20000		17.0	19.4	22.6	25.9	27.0	27.6	29.3	30.5	30.7	30.9	30.9	31.1	31.2	31.2	31.7
IV 18000		17.1	19.5	22.7	25.6	27.1	27.7	29.4	30.6	30.7	31.0	31.0	31.2	31.3	31.3	31.8
IV 16000		17.3	19.8	22.9	25.9	27.3	27.9	29.6	30.9	31.1	31.2	31.2	31.5	31.6	31.6	32.1
IV 14000		17.4	20.0	23.2	26.1	27.6	28.2	29.9	31.3	31.6	31.7	31.7	32.0	32.1	32.1	32.6
IV 12000		18.8	21.3	25.2	28.2	29.6	30.2	32.1	33.5	33.8	33.9	33.9	34.1	34.3	34.3	34.8
IV 10000		20.6	23.7	27.9	30.9	32.3	32.9	35.0	36.5	36.7	36.8	36.8	37.1	37.2	37.2	37.7
IV 9000		21.2	24.4	28.8	31.7	33.2	33.8	35.5	37.3	37.6	37.7	37.7	37.9	38.0	38.0	38.5
IV 8000		21.7	24.9	29.3	32.2	33.7	34.3	36.3	37.8	38.0	38.2	38.2	38.4	38.5	38.5	39.0
IV 7000		22.8	26.3	30.7	33.7	35.1	35.7	37.9	39.4	39.6	39.8	39.9	40.0	40.1	40.1	40.6
IV 6000		24.9	28.4	33.3	36.8	38.3	38.9	41.2	42.7	42.9	43.0	43.0	43.3	43.4	43.4	43.9
IV 5000		27.1	30.7	36.1	40.0	41.5	42.1	44.4	45.9	46.1	46.2	46.2	46.5	46.6	46.6	47.1
IV 4500		29.4	33.2	38.5	43.0	44.5	45.1	47.4	48.9	49.1	49.3	49.3	49.5	49.6	49.6	50.1
IV 4000		32.8	37.0	42.7	47.9	49.8	50.5	52.8	54.3	54.5	54.6	54.6	54.9	55.0	55.0	55.5
IV 3500		35.0	39.3	45.0	50.5	52.3	53.0	55.4	57.0	57.2	57.3	57.3	57.6	57.7	57.7	58.2
IV 3000		38.4	43.4	50.0	55.7	57.7	58.5	61.0	62.7	62.9	63.0	63.0	63.3	63.4	63.4	63.9
IV 2500		40.4	45.6	52.4	59.4	61.3	62.2	64.9	66.6	66.8	67.0	67.0	67.2	67.3	67.3	67.8
IV 2000		43.3	48.8	56.1	63.8	65.9	66.8	69.5	71.2	71.5	71.6	71.6	71.8	72.0	72.0	72.4
IV 1800		44.6	50.5	57.9	65.9	67.9	68.9	71.6	73.3	73.5	73.7	73.7	73.9	74.0	74.0	74.5
IV 1500		46.1	52.0	59.6	68.4	70.5	71.7	74.5	76.2	76.6	76.7	76.7	77.0	77.1	77.1	77.6
IV 1200		47.1	53.7	61.8	71.6	73.9	75.2	78.4	80.1	80.5	80.6	80.6	80.9	81.0	81.0	81.5
IV 1000		47.3	54.0	62.4	73.2	75.5	77.0	80.5	82.2	82.6	82.7	82.7	82.9	83.0	83.0	83.5
IV 900		47.6	54.5	63.0	73.9	76.5	78.2	81.8	83.5	83.9	84.0	84.0	84.3	84.4	84.4	84.9
IV 800		47.7	54.6	63.2	74.1	77.0	78.7	82.7	84.5	84.9	85.0	85.0	85.2	85.4	85.4	85.9
IV 700		47.7	54.6	63.3	74.6	77.6	79.4	83.4	85.2	85.6	85.7	85.7	86.0	86.1	86.1	86.6
IV 600		47.8	54.9	63.5	75.1	78.2	80.1	84.1	86.1	86.5	86.6	86.6	86.8	87.0	87.0	87.4
IV 500		47.8	54.9	63.8	75.5	78.8	81.1	85.4	87.3	87.7	87.8	87.8	88.0	88.2	88.2	88.7
IV 400		47.8	54.9	63.8	75.6	78.9	81.2	86.1	88.0	88.4	88.5	88.5	88.8	88.9	88.9	89.4
IV 300		47.8	55.0	63.9	75.9	79.3	82.0	87.9	90.4	90.9	91.1	91.1	91.3	91.5	91.5	92.0
IV 200		47.8	55.0	63.9	75.9	79.3	82.1	88.3	91.0	92.9	93.2	93.2	93.4	94.0	94.1	95.0
IV 100		47.8	55.0	63.9	75.9	79.3	82.1	88.4	91.1	93.3	93.9	93.9	94.4	95.4	95.6	97.4
IV 0		47.8	55.0	63.9	75.9	79.3	82.1	88.4	91.1	93.3	93.9	93.9	94.5	95.9	96.1	100.0

TOTAL NUMBER OF OBSERVATIONS

820

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032

RHEIN-MAIN APT GERMANY/FRANKFURT 67-76

NOV

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0300-0500

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ .	≥ 0
NO CEILING		12.3	13.9	16.8	19.8	20.8	21.4	22.8	23.6	23.7	23.7	23.8	23.8	23.8	23.8	24.5
≥ 20000		13.6	15.3	18.3	21.8	23.1	23.7	25.1	25.9	26.0	26.0	26.1	26.1	26.1	26.1	26.9
≥ 18000		13.6	15.3	18.3	21.8	23.1	23.7	25.1	25.9	26.0	26.0	26.1	26.1	26.1	26.1	26.8
≥ 16000		13.6	15.3	18.3	21.8	23.1	23.7	25.1	25.9	26.0	26.0	26.1	26.1	26.1	26.1	26.8
≥ 14000		13.9	15.0	18.6	22.2	23.5	24.0	25.4	26.2	26.4	26.4	26.5	26.5	26.5	26.5	27.2
≥ 12000		15.1	16.9	20.0	23.6	25.0	25.5	26.9	27.7	27.9	27.9	28.0	28.0	28.0	28.0	28.7
≥ 10000		17.1	19.0	23.0	26.7	28.1	28.7	30.1	31.0	31.1	31.1	31.2	31.2	31.2	31.2	31.9
≥ 9000		18.6	20.5	24.6	28.4	29.8	30.4	31.9	32.8	32.9	32.9	33.1	33.1	33.1	33.1	33.8
≥ 8000		19.2	21.0	25.2	29.1	30.5	31.1	32.6	33.5	33.6	33.6	33.8	33.8	33.8	33.8	34.5
≥ 7000		20.6	22.4	26.7	30.9	32.3	32.9	34.5	35.4	35.5	35.5	35.6	35.6	35.6	35.6	36.3
≥ 6000		22.0	23.9	28.6	32.7	34.1	34.8	36.3	37.2	37.3	37.3	37.5	37.5	37.5	37.5	38.2
≥ 5000		25.4	27.5	32.8	37.0	38.4	39.1	40.6	41.5	41.6	41.6	41.7	41.7	41.7	41.7	42.4
≥ 4500		27.7	30.1	35.4	39.8	41.2	41.8	43.4	44.3	44.4	44.4	44.5	44.5	44.5	44.5	45.2
≥ 4000		29.7	32.1	37.8	42.7	44.2	45.1	46.9	47.9	48.0	48.0	48.1	48.1	48.1	48.1	48.8
≥ 3500		32.0	34.6	40.7	46.0	47.5	48.4	50.4	51.3	51.4	51.4	51.6	51.6	51.6	51.6	52.3
≥ 3000		35.1	37.9	44.3	50.2	51.8	52.7	54.7	55.6	55.7	55.7	55.8	55.8	55.8	55.8	56.5
≥ 2500		37.7	40.7	47.7	54.6	56.3	57.2	59.3	60.2	60.3	60.3	60.5	60.5	60.5	60.5	61.2
≥ 2000		40.7	44.0	52.5	60.0	62.0	63.1	65.4	66.4	66.5	66.5	66.6	66.6	66.6	66.6	67.3
≥ 1800		41.4	44.7	54.0	61.8	63.8	65.0	67.3	68.3	68.4	68.4	68.6	68.6	68.6	68.6	69.2
≥ 1500		43.5	47.1	57.7	66.1	68.2	69.7	72.4	73.4	73.5	73.5	73.6	73.6	73.6	73.6	74.3
≥ 1200		44.2	48.1	59.1	68.7	71.6	73.2	76.3	77.3	77.5	77.5	77.6	77.6	77.6	77.6	78.3
≥ 1000		44.5	48.6	59.8	69.9	73.3	75.4	78.6	79.8	79.9	79.9	80.0	80.0	80.0	80.0	80.7
≥ 900		44.6	48.8	60.1	70.4	73.9	76.3	79.5	80.7	80.8	80.8	80.9	80.9	80.9	80.9	81.6
≥ 800		44.7	49.1	60.7	71.3	74.9	77.6	81.0	82.2	82.3	82.3	82.4	82.4	82.4	82.4	83.1
≥ 700		44.7	49.2	60.9	71.7	75.3	78.0	81.6	82.8	82.9	82.9	83.0	83.0	83.0	83.0	83.7
≥ 600		44.7	49.4	61.4	72.1	75.8	78.6	82.4	83.8	83.9	83.9	84.0	84.0	84.0	84.0	84.7
≥ 500		44.7	49.4	61.4	72.4	76.1	79.4	83.9	85.3	85.4	85.4	85.5	85.5	85.5	85.5	86.2
≥ 400		44.9	49.5	61.5	72.8	76.6	80.1	85.2	86.7	86.8	86.8	86.9	86.9	86.9	86.9	87.7
≥ 300		45.0	49.7	61.7	73.1	76.9	80.3	86.1	88.0	88.4	88.4	88.6	88.6	88.6	88.6	89.6
≥ 200		45.0	49.7	61.7	73.1	76.9	80.3	87.3	90.9	91.9	92.3	92.5	92.7	93.1	93.3	94.5
≥ 100		45.0	49.7	61.7	73.1	76.9	80.3	87.3	90.9	92.1	92.8	93.2	93.5	94.6	94.9	97.9
≥ 0		45.0	49.7	61.7	73.1	76.9	80.3	87.3	90.9	92.1	92.8	93.2	93.8	94.8	95.1	100.0

TOTAL NUMBER OF OBSERVATIONS

865

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032

RHEIN-MAIN APT GERMANY/FRANKFURT

67-76

NOV

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0600-0800

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ .	≥ 15	≥ .	≥ 0
NO CEILING		9.8	10.4	11.7	14.6	15.6	16.8	19.4	20.4	20.6	20.7	20.7	20.7	20.9	20.9	21.3
≥ 20000		11.8	12.5	14.1	17.7	19.0	20.6	23.9	24.8	25.0	25.1	25.1	25.1	25.3	25.3	25.7
≥ 18000		11.8	12.5	14.1	17.7	19.0	20.6	23.9	24.8	25.0	25.1	25.1	25.1	25.3	25.3	25.7
≥ 16000		11.8	12.5	14.1	17.7	19.0	20.6	23.9	24.8	25.0	25.1	25.1	25.1	25.3	25.3	25.7
≥ 14000		11.8	12.5	14.3	17.8	19.1	20.7	24.0	24.9	25.1	25.3	25.3	25.3	25.4	25.4	25.8
≥ 12000		12.4	13.3	15.3	19.0	20.3	22.0	25.5	26.4	26.7	26.8	26.8	26.8	26.9	26.9	27.3
≥ 10000		14.1	15.4	18.0	21.9	23.3	25.1	28.9	29.9	30.1	30.2	30.2	30.2	30.4	30.4	30.8
≥ 9000		15.2	16.6	19.2	23.3	24.8	26.8	30.6	31.6	31.9	32.0	32.0	32.0	32.1	32.1	32.6
≥ 8000		16.0	17.5	20.3	24.4	26.1	28.0	32.0	33.0	33.3	33.4	33.4	33.4	33.6	33.6	34.1
≥ 7000		16.7	18.2	21.0	25.1	26.8	28.7	32.9	34.0	34.2	34.3	34.3	34.3	34.5	34.5	35.0
≥ 6000		18.4	20.0	23.1	27.5	29.2	31.2	35.5	36.5	36.7	36.8	36.8	36.8	37.1	37.1	37.5
≥ 5000		20.3	22.0	25.1	29.7	31.7	34.1	38.9	40.0	40.2	40.3	40.3	40.3	40.6	40.6	41.0
≥ 4500		22.4	24.1	27.5	32.2	34.4	36.8	42.1	43.1	43.3	43.5	43.5	43.5	43.7	43.7	44.1
≥ 4000		23.6	25.6	29.5	34.8	37.1	39.6	45.1	46.1	46.3	46.5	46.5	46.5	46.7	46.7	47.2
≥ 3500		25.3	27.5	31.4	36.7	39.4	42.1	47.9	49.0	49.2	49.4	49.4	49.4	49.6	49.6	50.1
≥ 3000		28.6	31.1	35.5	41.3	44.0	46.7	52.7	54.0	54.2	54.3	54.3	54.3	54.6	54.6	55.0
≥ 2500		30.0	32.6	37.1	43.8	46.7	49.7	56.9	58.5	58.7	58.9	58.9	58.9	59.1	59.1	59.6
≥ 2000		32.8	35.6	41.0	48.8	52.4	55.5	63.5	65.2	65.5	65.7	65.7	65.7	65.9	65.9	66.4
≥ 1800		34.4	37.2	43.1	51.1	54.7	57.9	66.0	67.8	68.0	68.3	68.4	68.4	68.6	68.6	69.1
≥ 1500		36.3	39.3	45.9	54.7	58.3	61.5	69.8	71.7	72.1	72.3	72.4	72.4	72.7	72.7	73.1
≥ 1200		37.2	40.2	47.6	57.5	61.3	64.9	73.6	75.8	76.1	76.4	76.5	76.5	76.7	76.7	77.2
≥ 1000		37.4	40.6	48.3	58.5	62.6	66.4	75.4	77.9	78.2	78.4	78.6	78.6	78.8	78.8	79.3
≥ 900		37.4	40.6	48.4	58.6	62.7	66.5	75.0	78.2	78.6	78.8	78.9	78.9	79.1	79.1	79.6
≥ 800		37.4	40.7	48.9	59.3	63.5	67.7	77.5	80.0	80.4	80.6	80.8	80.8	81.0	81.0	81.5
≥ 700		37.4	40.8	49.1	59.3	63.7	68.1	78.3	80.8	81.2	81.5	81.6	81.6	81.8	81.8	82.3
≥ 600		37.4	40.9	49.7	60.1	64.4	68.9	79.6	82.2	82.7	83.0	83.1	83.1	83.3	83.3	83.8
≥ 500		37.4	40.9	49.9	60.5	64.9	69.4	80.6	83.2	83.8	84.0	84.1	84.1	84.4	84.4	84.8
≥ 400		37.4	40.9	49.9	60.6	65.0	70.0	82.0	84.8	85.5	86.0	86.1	86.1	86.3	86.3	86.8
≥ 300		37.5	41.0	50.1	60.7	65.2	70.2	83.0	86.4	87.4	88.3	88.5	88.5	88.9	88.9	89.5
≥ 200		37.5	41.0	50.1	60.7	65.2	70.2	83.1	87.6	89.2	90.5	91.2	91.9	92.7	92.9	93.5
≥ 100		37.5	41.0	50.1	60.7	65.2	70.2	83.1	87.6	89.3	90.7	91.5	92.6	93.9	94.2	96.8
≥ 0		37.5	41.0	50.1	60.7	65.2	70.2	83.1	87.6	89.3	90.7	91.5	92.6	94.4	94.8	100.0

TOTAL NUMBER OF OBSERVATIONS

863

2

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032

RHEIN-MAIN APT GERMANY/FRANKFURT

67-76

NOV

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0900-1100

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/10	≥ .	≥ 0
NO CEILING		8.6	9.7	11.2	13.8	14.8	15.6	16.9	17.0	17.4	17.5	17.5	17.6	17.6	17.6	17.6
≥ 20000		12.8	14.0	15.3	20.0	21.8	22.9	24.4	24.8	25.4	25.5	25.5	25.6	25.6	25.6	25.7
IV 8000		12.9	14.2	16.4	20.1	22.0	23.0	24.6	24.9	25.3	25.6	25.6	25.7	25.7	25.7	25.9
IV 16000		12.9	14.2	16.4	20.1	22.0	23.0	24.6	24.9	25.3	25.6	25.6	25.7	25.7	25.7	25.9
IV 14000		13.0	14.3	16.5	20.2	22.1	23.1	24.7	25.0	25.7	25.7	25.7	25.9	25.9	25.9	26.0
IV 12000		13.3	14.9	17.1	20.9	22.9	24.0	25.5	25.9	26.4	26.6	26.6	26.7	26.7	26.7	26.8
IV 10000		14.9	16.6	19.4	23.6	25.0	27.2	29.3	29.6	30.2	30.3	30.3	30.5	30.5	30.5	30.6
IV 9000		15.9	17.7	20.5	25.0	27.5	28.7	30.8	31.2	31.8	31.9	31.9	32.0	32.0	32.0	32.1
IV 8000		16.3	18.1	20.9	25.4	27.9	29.0	31.3	31.6	32.2	32.3	32.3	32.5	32.5	32.5	32.6
IV 7000		17.2	19.0	21.8	26.3	28.9	30.2	32.7	32.8	33.4	33.5	33.5	33.6	33.6	33.6	33.8
IV 6000		18.3	20.2	23.1	27.7	30.7	32.1	34.7	34.8	35.4	35.5	35.5	35.7	35.7	35.7	35.8
IV 5000		20.3	22.4	25.5	30.2	33.2	34.6	37.7	37.9	38.5	38.5	38.5	38.7	38.7	38.7	38.8
IV 4500		22.6	24.7	27.7	33.3	36.2	37.8	40.5	41.1	41.7	41.8	41.8	41.9	41.9	41.9	42.0
IV 4000		25.5	27.9	31.2	37.8	41.1	42.7	45.9	46.5	47.1	47.2	47.2	47.3	47.3	47.3	47.5
IV 3500		28.5	31.2	34.7	41.6	45.0	46.5	50.4	51.0	51.6	51.7	51.7	51.8	51.8	51.8	51.9
IV 3000		31.6	34.7	38.4	45.7	49.5	51.1	55.8	56.4	57.0	57.1	57.1	57.3	57.3	57.3	57.4
IV 2500		34.1	37.3	41.9	50.3	54.3	57.5	62.5	63.0	63.8	63.9	63.9	64.0	64.0	64.0	64.1
IV 2000		36.0	39.4	44.4	53.5	57.6	61.2	66.9	67.8	68.5	68.6	68.6	68.7	68.7	68.7	68.8
IV 1800		37.3	41.1	46.3	55.5	59.7	63.4	69.5	70.4	71.1	71.2	71.2	71.3	71.3	71.3	71.4
IV 1500		39.0	42.9	48.7	58.3	62.6	66.6	73.4	74.4	75.2	75.3	75.3	75.4	75.4	75.4	75.6
IV 1200		40.3	44.4	51.0	62.0	66.6	70.8	77.4	78.9	79.8	79.9	80.0	80.2	80.2	80.2	80.3
IV 1000		40.5	44.6	51.7	63.3	68.0	72.4	79.7	80.6	81.6	81.7	81.8	81.9	81.9	81.9	82.1
IV 900		40.9	44.9	51.9	63.6	68.8	73.0	80.4	81.3	82.3	82.4	82.5	82.6	82.6	82.6	82.8
IV 800		40.7	44.9	52.3	64.1	69.1	73.4	81.2	82.4	83.4	83.5	83.6	83.7	83.7	83.7	83.8
IV 700		41.0	45.1	52.5	64.3	69.3	73.9	82.2	83.5	84.4	84.5	84.7	84.8	84.8	84.8	84.9
IV 600		41.1	45.2	52.7	64.6	69.7	74.4	83.4	84.7	85.7	86.0	86.1	86.2	86.2	86.2	86.3
IV 500		41.2	45.3	52.8	64.9	70.2	75.1	84.3	85.7	86.9	87.1	87.2	87.4	87.4	87.4	87.5
IV 400		41.2	45.3	52.8	64.9	70.2	75.2	85.1	86.7	88.4	89.6	89.8	90.0	90.0	90.0	90.1
IV 300		41.2	45.3	52.8	64.9	70.2	75.4	85.8	87.8	90.4	92.4	92.9	93.2	93.3	93.3	93.4
IV 200		41.2	45.3	52.8	64.9	70.2	75.4	86.1	88.1	90.9	93.3	94.0	94.5	95.2	95.2	95.4
IV 100		41.2	45.3	52.8	64.9	70.2	75.4	86.1	88.1	90.9	93.3	94.0	94.6	95.5	95.7	97.4
IV C		41.2	45.3	52.8	64.9	70.2	75.4	86.1	88.1	90.9	93.3	94.0	94.6	96.0	96.5	100.0

TOTAL NUMBER OF OBSERVATIONS

847

C
2DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATIONRHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME67-76
YEARSNP
MONTHPERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)1200-1400
HOURS (LT)

CEILING (FEET)	VISIBILITY - STATUTE MILES															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/8	≥ 1/16	≥ 0
NO CEILING		13.2	13.6	15.5	16.8	17.3	17.4	17.6	17.9	18.4	18.4	18.5	18.6	18.6	18.6	18.6
≥ 20000		13.3	19.1	21.7	23.7	24.6	24.8	25.1	25.5	26.1	26.1	26.2	26.3	26.3	26.3	26.3
≥ 18000		17.6	19.5	22.3	24.3	25.1	25.4	25.7	26.1	26.7	26.7	26.8	26.9	26.9	26.9	26.9
≥ 16000		18.6	19.5	22.3	24.3	25.1	25.4	25.7	26.1	26.7	26.7	26.8	26.9	26.9	26.9	26.9
≥ 14000		19.7	19.6	22.4	24.4	25.3	25.5	25.9	26.2	26.8	26.8	26.9	27.0	27.0	27.0	27.0
≥ 12000		20.6	21.6	24.4	26.7	27.5	27.8	28.2	28.6	29.2	29.3	29.4	29.5	29.5	29.5	29.5
≥ 10000		24.0	25.0	28.1	30.7	31.8	32.1	32.9	33.2	33.8	33.9	34.0	34.2	34.2	34.2	34.2
≥ 9000		24.7	26.1	29.3	32.3	33.3	33.7	34.5	34.9	35.5	35.6	35.7	35.8	35.8	35.8	35.8
≥ 8000		25.1	26.6	30.0	33.2	34.4	34.8	35.4	35.9	36.5	36.7	36.8	36.9	36.9	36.9	36.9
≥ 7000		25.4	26.8	30.2	33.7	34.9	35.2	36.1	36.4	37.0	37.1	37.2	37.4	37.4	37.4	37.4
≥ 6000		26.6	28.0	31.7	35.5	36.7	37.0	37.8	38.2	38.8	38.9	39.0	39.1	39.1	39.1	39.1
≥ 5000		28.6	30.2	34.2	38.1	39.6	40.0	40.9	41.3	41.9	42.0	42.1	42.2	42.2	42.2	42.2
≥ 4500		30.4	32.0	35.9	40.2	41.8	42.3	43.3	43.7	44.2	44.4	44.5	44.6	44.6	44.6	44.6
≥ 4000		34.0	36.1	40.3	44.6	46.5	47.3	48.3	48.6	49.2	49.3	49.5	49.6	49.6	49.6	49.6
≥ 3500		37.8	40.2	44.6	49.1	51.1	52.2	53.3	53.6	54.2	54.3	54.7	54.8	54.8	54.8	54.8
≥ 3000		41.0	43.5	49.0	54.2	56.3	58.0	59.7	60.0	60.6	60.9	61.2	61.3	61.3	61.3	61.3
≥ 2500		45.9	48.9	54.3	60.6	62.9	64.9	66.9	67.3	67.9	68.1	68.6	68.7	68.7	68.7	68.7
≥ 2000		49.5	52.6	58.1	64.5	66.8	69.3	71.6	72.0	72.6	72.8	73.3	73.5	73.5	73.5	73.5
≥ 1800		50.2	53.4	59.3	65.8	68.1	70.7	73.4	73.8	74.4	74.6	75.1	75.3	75.3	75.3	75.3
≥ 1500		53.0	56.7	63.0	69.6	72.0	74.6	78.1	78.6	79.2	79.5	80.1	80.3	80.3	80.3	80.3
≥ 1200		53.4	57.3	64.4	72.1	74.6	77.6	81.3	81.9	82.4	82.7	83.3	83.5	83.5	83.5	83.5
≥ 1000		53.4	57.5	65.0	73.3	76.0	79.6	84.0	84.6	85.2	85.5	86.1	86.4	86.4	86.4	86.4
≥ 900		53.4	57.5	65.0	73.4	76.2	79.7	84.1	84.7	85.3	85.6	86.2	86.5	86.5	86.5	86.5
≥ 800		53.4	57.7	65.4	73.8	76.6	80.4	85.4	86.0	86.6	87.0	87.5	87.8	87.8	87.8	87.8
≥ 700		53.4	57.7	65.4	73.9	76.7	80.7	85.9	86.7	87.3	87.7	88.3	88.5	88.5	88.5	88.5
≥ 600		53.4	57.7	65.4	73.9	76.7	80.9	86.6	87.4	88.1	88.7	89.3	89.6	89.6	89.6	89.6
≥ 500		53.4	57.7	65.4	73.9	76.7	81.4	88.0	88.8	89.0	90.0	90.6	91.2	91.5	91.5	91.5
≥ 400		53.4	57.7	65.4	73.9	76.9	81.5	88.3	89.3	91.1	92.2	92.9	93.1	93.1	93.1	93.1
≥ 300		53.4	57.7	65.4	73.9	77.1	81.7	88.6	89.8	92.4	94.1	95.3	95.6	95.6	95.6	95.6
≥ 200		53.4	57.7	65.4	73.9	77.1	81.7	88.6	89.8	92.8	94.4	96.0	96.4	97.0	97.0	97.5
≥ 100		53.4	57.7	65.4	73.9	77.1	81.7	88.6	89.8	92.8	94.4	96.0	96.4	97.2	97.3	98.3
≥ 0		53.4	57.7	65.4	73.9	77.1	81.7	88.6	89.8	92.8	94.4	96.0	96.6	97.6	98.2	100.0

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

TOTAL NUMBER OF OBSERVATIONS

843

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032 RHEIN-HAIN APT GERMANY/FRANKFURT 67-76

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1500-1700

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥1/16	≥1/8	≥0
NO CEILING		16.0	17.9	19.0	20.4	21.4	22.0	23.2	23.2	23.6	23.6	23.6	23.9	23.9	23.9	23.9
≥ 20000		21.6	24.0	25.1	27.0	28.6	29.5	30.8	30.8	31.2	31.2	31.2	31.5	31.5	31.5	31.5
≥ 18000		21.6	24.0	25.1	27.0	28.6	29.6	30.9	30.9	31.4	31.4	31.4	31.6	31.6	31.6	31.6
≥ 16000		21.6	24.0	25.1	27.0	28.7	29.7	31.0	31.0	31.5	31.5	31.5	31.7	31.7	31.7	31.7
≥ 14000		22.6	24.9	26.1	28.1	29.9	30.9	32.2	32.2	32.7	32.7	32.7	32.9	32.9	32.9	32.9
≥ 12000		24.3	26.8	28.1	30.2	31.9	32.9	34.3	34.3	34.8	34.8	34.8	35.0	35.0	35.0	35.0
≥ 10000		27.3	30.3	31.6	33.8	35.7	37.1	38.5	38.6	39.1	39.1	39.1	39.3	39.3	39.3	39.3
≥ 9000		28.5	31.7	33.1	35.6	37.5	39.1	40.7	41.0	41.4	41.4	41.4	41.7	41.7	41.7	41.7
≥ 8000		29.3	32.7	34.4	36.9	39.0	40.6	42.3	42.5	43.0	43.0	43.0	43.2	43.2	43.2	43.2
≥ 7000		29.5	32.8	34.6	37.3	39.3	41.0	42.6	42.9	43.3	43.3	43.3	43.6	43.6	43.6	43.6
≥ 6000		30.9	34.2	36.1	39.2	41.2	43.0	44.9	45.1	45.6	45.6	45.6	45.8	45.8	45.8	45.8
≥ 5000		34.0	37.8	39.8	43.5	45.5	47.3	49.2	49.4	49.9	49.9	49.9	50.1	50.1	50.1	50.1
≥ 4500		35.6	39.4	41.4	45.4	47.4	49.2	51.1	51.3	52.0	52.0	52.0	52.3	52.3	52.3	52.3
≥ 4000		38.7	43.0	45.4	49.4	51.4	53.2	55.2	55.6	56.4	56.4	56.4	56.7	56.7	56.7	56.7
≥ 3500		42.9	47.1	50.0	54.8	56.8	59.0	61.4	61.8	62.6	62.6	62.6	62.8	62.8	62.8	62.8
≥ 3000		46.6	51.1	54.3	59.1	61.4	63.8	67.0	67.3	68.3	68.3	68.3	68.5	68.5	68.5	68.5
≥ 2000		49.0	53.9	57.4	63.1	65.4	67.8	71.1	71.5	72.4	72.4	72.4	72.7	72.7	72.7	72.7
≥ 1800		52.4	57.4	60.8	66.9	69.5	72.1	75.5	76.0	77.0	77.0	77.0	77.2	77.2	77.2	77.2
≥ 1600		53.3	58.6	62.2	68.9	71.5	74.5	78.0	78.6	79.7	79.7	79.7	79.9	79.9	79.9	79.9
≥ 1500		54.3	59.7	63.4	70.5	73.4	76.4	80.0	80.6	81.9	81.9	81.9	82.2	82.2	82.2	82.2
≥ 1200		55.0	60.7	64.8	72.9	75.9	78.9	83.0	83.7	85.0	85.0	85.0	85.3	85.3	85.3	85.3
≥ 1000		55.1	60.9	65.4	73.8	76.7	79.7	84.1	84.8	86.1	86.1	86.1	86.3	86.3	86.3	86.3
≥ 900		55.1	60.9	65.4	73.9	76.8	79.8	84.2	85.0	86.3	86.3	86.3	86.6	86.6	86.6	86.6
≥ 800		55.1	61.0	65.7	74.5	77.6	80.6	85.7	86.6	87.9	87.9	87.9	88.2	88.2	88.2	88.2
≥ 700		55.1	61.0	65.7	74.6	77.8	80.9	86.1	87.1	88.5	88.5	88.5	88.8	88.8	88.8	88.8
≥ 600		55.1	61.0	65.8	74.7	77.9	81.4	86.7	87.8	89.3	89.3	89.3	89.7	89.7	89.7	89.7
≥ 500		55.1	61.0	65.8	74.7	77.9	81.5	87.6	88.7	90.3	90.3	90.3	90.6	90.6	90.6	90.6
≥ 400		55.1	61.0	65.8	74.7	78.3	81.8	88.8	90.1	92.3	92.5	92.5	92.9	92.9	92.9	92.9
≥ 300		55.1	61.0	65.8	74.7	78.3	81.8	89.4	90.9	93.7	93.9	94.1	94.5	94.7	94.7	94.8
≥ 200		55.1	61.0	65.8	74.7	78.3	81.8	89.5	91.0	94.3	95.0	95.4	96.2	96.4	96.8	96.9
≥ 100		55.1	61.0	65.8	74.7	78.3	81.8	89.5	91.0	94.3	95.0	95.4	96.3	96.7	97.4	98.3
≥ 0		55.1	61.0	65.8	74.7	78.3	81.8	89.5	91.0	94.3	95.0	95.4	96.4	97.3	98.1	100.0

TOTAL NUMBER OF OBSERVATIONS 842

DATA PROCESSING BRANCH
USAF ETAC
AIP WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

57-76
YEARS

NO.
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1800-2300
HOURS LST

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2.5	≥ 2	≥ 1.5	≥ 1.4	≥ 1	≥ .9	≥ .8	≥ .7	≥ .6	≥ .5	≥ 0
NO CEILING		18.0	20.0	22.1	25.7	26.4	27.1	28.0	28.6	28.9	28.9	28.9	29.0	29.0	29.1	29.6
≥ 20000		20.3	22.9	25.1	29.0	29.8	31.0	31.9	32.5	32.7	32.7	32.7	32.8	32.8	32.9	33.4
≥ 18000		21.0	23.1	25.4	29.2	30.0	31.2	32.1	32.7	32.9	32.9	32.9	33.1	33.1	33.2	33.6
≥ 16000		21.0	23.1	25.4	29.2	30.0	31.2	32.1	32.7	32.9	32.9	32.9	33.1	33.1	33.2	33.6
≥ 14000		21.0	23.8	26.1	29.9	30.7	31.9	32.8	33.4	33.6	33.6	33.6	33.8	33.8	33.9	34.3
≥ 12000		23.0	25.2	27.7	31.7	32.7	33.9	34.8	35.4	35.6	35.6	35.6	35.7	35.7	35.9	36.3
≥ 10000		27.0	29.4	32.2	36.2	37.5	38.7	39.6	40.2	40.4	40.4	40.4	40.5	40.5	40.7	41.1
≥ 9000		28.5	31.0	33.8	37.3	39.1	40.3	41.4	41.9	42.2	42.2	42.2	42.3	42.3	42.4	42.9
≥ 8000		29.2	31.7	34.5	38.6	39.8	41.0	42.1	42.6	42.9	42.9	42.9	43.0	43.0	43.1	43.6
≥ 7000		31.2	33.6	36.4	40.7	42.2	43.3	44.5	45.1	45.3	45.3	45.3	45.4	45.4	45.6	46.0
≥ 6000		33.2	35.6	38.7	42.9	44.4	45.7	47.1	47.7	47.9	47.9	47.9	48.0	48.0	48.1	48.6
≥ 5000		36.1	38.7	41.7	46.6	48.4	49.8	51.2	51.8	52.3	52.3	52.3	52.5	52.5	52.6	53.0
≥ 4500		38.6	41.4	44.4	49.6	51.4	52.8	54.4	55.0	55.6	55.6	55.6	55.7	55.7	55.8	56.3
≥ 4000		42.3	45.1	48.1	54.0	55.8	57.2	59.0	59.8	60.4	60.4	60.4	60.5	60.5	60.6	61.1
≥ 3500		45.0	48.0	51.6	57.7	59.7	61.1	63.1	63.9	64.5	64.5	64.5	64.6	64.6	64.7	65.2
≥ 3000		47.2	50.6	54.8	61.4	63.6	65.0	67.1	67.9	68.5	68.5	68.5	68.6	68.6	68.7	69.2
≥ 2500		49.5	53.5	57.7	64.8	67.3	69.2	71.3	72.1	72.7	72.7	72.7	72.8	72.8	72.9	73.4
≥ 2000		51.4	56.1	60.5	68.2	70.9	73.4	75.7	76.5	77.2	77.2	77.2	77.3	77.3	77.5	77.9
≥ 1800		52.2	56.9	61.6	69.4	72.1	74.5	77.0	77.8	78.5	78.5	78.5	78.6	78.6	78.7	79.2
≥ 1500		53.0	57.8	63.0	71.6	74.4	77.3	80.0	80.8	81.5	81.5	81.5	81.7	81.7	81.8	82.2
≥ 1200		54.0	59.0	65.0	74.2	77.0	80.3	83.3	84.1	84.9	84.9	84.9	85.0	85.0	85.2	85.6
≥ 1000		54.1	59.1	65.1	74.8	77.7	81.3	84.8	85.4	86.4	86.4	86.4	86.6	86.6	86.7	87.1
≥ 900		54.1	59.1	65.2	75.1	78.2	81.8	85.4	86.2	87.0	87.0	87.0	87.1	87.1	87.3	87.7
≥ 800		54.1	59.1	65.4	75.5	78.5	82.4	86.1	86.9	87.7	87.7	87.7	87.9	87.9	88.0	88.4
≥ 700		54.1	59.1	65.4	75.7	78.9	83.1	86.8	87.6	88.4	88.4	88.4	88.6	88.6	88.7	89.1
≥ 600		54.1	59.1	65.5	76.1	79.3	83.8	87.6	88.4	89.3	89.3	89.3	89.4	89.4	89.5	90.0
≥ 500		54.1	59.1	65.7	76.4	79.9	85.3	89.3	90.2	91.1	91.1	91.1	91.2	91.2	91.4	91.8
≥ 400		54.1	59.1	65.7	76.6	80.3	86.0	90.2	91.1	92.1	92.1	92.1	92.2	92.2	92.3	92.8
≥ 300		54.1	59.1	65.7	76.6	80.3	86.0	91.6	92.8	93.8	93.9	94.0	94.2	94.2	94.3	94.7
≥ 200		54.1	59.1	65.7	76.6	80.3	86.0	91.6	92.8	94.7	95.4	95.8	95.9	96.0	96.3	97.1
≥ 100		54.1	59.1	65.7	76.6	80.3	86.0	91.6	92.8	94.7	95.4	95.9	96.1	96.5	97.0	98.6
≥ 0		54.1	59.1	65.7	76.6	80.3	86.0	91.6	92.8	94.7	95.4	95.9	96.1	96.6	97.1	100.0

TOTAL NUMBER OF OBSERVATIONS

856

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 67-76

NOV

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

2100-2300
HOURS LST

CEILING 'FEET'	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ .	≥ 0
NO CEILING		19.4	21.1	23.6	25.7	26.7	27.5	28.5	28.8	29.9	30.0	30.1	30.2	30.5	30.5	30.9
≥ 20000		21.4	23.3	26.2	28.5	29.4	30.7	31.6	32.0	33.1	33.2	33.3	33.4	33.6	33.8	34.1
≥ 18000		21.4	23.3	26.2	28.5	29.4	30.7	31.6	32.0	33.1	33.2	33.3	33.4	33.6	33.8	34.1
≥ 16000		21.4	23.3	26.2	28.6	29.5	30.8	31.8	32.1	33.2	33.3	33.4	33.5	33.8	33.9	34.2
≥ 14000		21.5	23.4	26.3	28.7	29.6	30.9	31.9	32.2	33.3	33.4	33.5	33.6	33.9	34.0	34.4
≥ 12000		22.3	24.3	27.5	30.1	31.2	32.5	33.6	34.1	35.2	35.3	35.4	35.7	35.9	36.0	36.4
≥ 10000		25.6	28.0	31.4	34.2	35.3	36.6	37.4	38.3	39.3	39.4	39.6	39.8	40.1	40.3	40.6
≥ 9000		26.9	29.3	32.8	35.7	36.7	38.0	39.2	39.7	40.7	40.9	41.0	41.2	41.6	41.7	42.0
≥ 8000		27.7	30.5	34.5	37.4	38.5	39.8	41.1	41.6	42.6	42.7	42.9	43.1	43.4	43.6	43.9
≥ 7000		28.9	32.0	36.0	39.3	40.4	41.7	43.0	43.4	44.5	44.6	44.7	45.0	45.3	45.5	45.8
≥ 6000		30.9	34.0	38.0	41.8	42.9	44.2	45.5	46.2	47.2	47.3	47.5	47.7	48.1	48.2	48.5
≥ 5000		33.4	36.8	41.1	46.0	47.1	48.5	49.9	50.8	51.8	51.9	52.1	52.3	52.7	52.8	53.1
≥ 4500		35.2	38.6	43.2	48.5	49.6	51.1	52.5	53.4	54.4	54.5	54.7	54.9	55.3	55.4	55.7
≥ 4000		37.4	41.3	46.2	52.4	53.8	55.4	56.9	57.7	58.8	58.9	59.0	59.3	59.6	59.7	60.1
≥ 3500		40.3	44.3	49.6	56.0	57.7	59.7	61.3	62.1	63.2	63.3	63.4	63.6	64.0	64.1	64.5
≥ 3000		42.7	47.1	52.9	60.4	62.2	64.3	66.0	67.1	68.2	68.4	68.5	68.7	69.1	69.2	69.5
≥ 2500		45.3	50.4	56.3	64.8	66.8	68.9	70.7	71.8	73.0	73.1	73.2	73.4	73.8	73.9	74.3
≥ 2000		48.3	53.8	60.0	69.1	71.2	73.3	75.1	75.2	77.3	77.4	77.5	77.8	78.2	78.3	78.6
≥ 1800		49.1	54.9	61.0	70.2	72.4	74.5	76.3	77.3	78.5	78.6	78.7	79.0	79.3	79.5	79.8
≥ 1500		49.4	55.3	61.6	71.5	73.7	76.0	77.9	79.0	80.3	80.4	80.5	80.8	81.1	81.2	81.6
≥ 1200		50.9	57.1	63.8	74.5	76.6	79.3	81.3	82.4	83.7	83.8	83.9	84.2	84.5	84.7	85.0
≥ 1000		50.9	57.3	63.9	75.1	77.6	80.5	82.9	83.9	85.2	85.4	85.5	85.7	86.1	86.2	86.5
≥ 900		50.9	57.3	63.9	75.6	78.0	81.0	83.5	84.5	85.8	86.0	86.1	86.3	86.7	86.8	87.1
≥ 800		51.1	57.6	64.2	76.3	78.7	81.8	84.5	85.8	87.1	87.2	87.4	87.6	88.0	88.1	88.4
≥ 700		51.2	57.7	64.3	76.7	79.2	82.4	85.4	86.7	88.0	88.1	88.2	88.4	88.8	88.9	89.3
≥ 600		51.2	57.9	64.5	77.0	79.6	82.9	85.8	87.1	88.4	88.5	88.7	88.9	89.3	89.4	89.7
≥ 500		51.2	57.9	64.5	77.7	80.5	83.8	87.0	88.3	89.6	89.7	89.8	90.1	90.4	90.6	90.9
≥ 400		51.2	57.9	64.6	77.8	80.6	84.3	88.4	89.7	91.1	91.3	91.4	91.6	92.0	92.1	92.4
≥ 300		51.2	57.9	64.6	77.8	80.9	84.8	89.6	91.3	92.7	92.8	93.0	93.3	93.6	93.7	94.1
≥ 200		51.2	57.9	64.6	77.9	81.0	84.9	89.8	91.6	93.6	93.9	94.1	94.6	95.2	95.3	96.2
≥ 100		51.2	57.9	64.6	77.9	81.0	84.9	89.8	91.6	93.9	94.3	94.8	95.3	96.3	96.7	98.6
≥ 0		51.2	57.9	64.6	77.9	81.0	84.9	89.8	91.6	93.9	94.3	94.8	95.6	96.6	96.9	100.0

TOTAL NUMBER OF OBSERVATIONS 847

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 67-76

DEC

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0000-1200
HOURS LST

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥1/16	≥1	≥0
NO CEILING		11.5	13.0	14.8	18.0	19.1	20.0	20.6	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.4
≥ 20000		12.7	14.4	16.6	20.9	21.4	22.3	22.9	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.7
≥ 18000		12.7	14.4	16.8	21.2	21.6	22.6	23.1	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.9
≥ 16000		12.7	14.4	16.8	21.2	21.6	22.6	23.1	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.9
≥ 14000		12.7	14.4	16.9	21.3	21.7	22.7	23.2	23.8	23.8	23.8	23.8	23.8	23.8	23.8	24.1
≥ 12000		12.9	14.7	17.3	21.7	22.2	23.1	23.8	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.6
≥ 10000		14.8	16.7	19.2	24.5	25.0	26.0	26.9	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.7
≥ 9000		16.1	18.0	20.5	25.8	26.2	27.3	28.2	28.8	28.8	28.8	28.8	28.8	28.8	28.8	29.0
≥ 8000		16.5	18.4	20.9	26.2	26.7	27.7	28.7	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.5
≥ 7000		17.7	19.9	22.7	28.1	28.5	29.7	30.6	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.4
≥ 6000		19.4	21.7	24.6	30.4	30.8	32.2	33.1	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.9
≥ 5000		21.5	23.8	27.4	33.6	34.4	35.9	37.1	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.9
≥ 4500		24.1	26.5	30.5	37.5	38.3	39.8	41.1	41.7	41.7	41.7	41.7	41.7	41.7	41.7	41.9
≥ 4000		26.1	29.5	33.9	41.7	42.7	44.3	45.9	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.7
≥ 3500		28.7	32.0	36.5	44.6	46.1	48.1	49.9	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.9
≥ 3000		30.7	34.5	39.0	47.3	48.8	51.0	52.9	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.9
≥ 2500		32.8	37.3	43.4	52.5	54.3	57.3	59.4	60.1	60.1	60.1	60.1	60.1	60.1	60.1	60.3
≥ 2000		35.6	41.0	48.0	57.9	60.3	63.3	65.7	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.7
≥ 1800		37.1	42.8	50.4	60.4	62.8	66.1	68.4	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.4
≥ 1500		39.4	45.5	54.3	64.7	67.7	71.5	74.5	75.4	75.4	75.4	75.4	75.4	75.4	75.4	75.6
≥ 1200		40.7	47.2	56.8	68.4	71.6	75.7	78.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9	80.1
≥ 1000		41.1	47.5	58.3	70.2	73.4	77.9	81.6	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.7
≥ 900		41.2	47.6	58.7	71.2	74.5	79.3	83.1	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.2
≥ 800		41.2	47.9	59.0	71.3	75.5	80.4	84.0	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.8
≥ 700		41.3	48.0	59.3	73.1	77.1	82.6	86.8	87.8	87.8	87.8	87.8	87.8	87.8	87.8	88.0
≥ 600		41.3	48.0	59.8	74.2	78.6	84.3	88.7	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.2
≥ 500		41.3	48.0	60.3	75.6	80.1	86.1	90.9	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.5
≥ 400		41.3	48.0	60.4	75.8	80.4	86.7	92.3	93.8	93.8	93.8	93.8	93.8	93.8	93.8	94.1
≥ 300		41.3	48.0	60.4	76.2	80.8	87.0	93.0	95.1	95.3	95.4	95.5	95.5	95.5	95.5	95.9
≥ 200		41.3	48.0	60.4	76.2	80.8	87.0	93.3	95.4	96.2	96.5	96.9	97.0	97.1	97.4	97.7
≥ 100		41.3	48.0	60.4	76.2	80.8	87.0	93.3	95.5	96.5	96.9	97.5	97.5	97.5	97.5	97.7
≥ 0		41.3	48.0	60.4	76.2	80.8	87.0	93.3	95.5	96.5	96.9	97.5	97.6	98.2	99.0	100.0

TOTAL NUMBER OF OBSERVATIONS

369

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032

RHEIN-MAIN APT GERMANY/FRANKFURT

67-76

DE

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0300-0500
HOURS LST

CEILING (FEET)	VISIBILITY - STATUTE MILES															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/16	≥ 1/8	≥ 0
NO CEILING		10.7	11.5	12.7	15.5	16.0	17.5	17.9	18.1	18.1	18.1	18.2	18.3	18.3	18.3	18.4
≥ 20000		11.5	12.5	14.1	17.2	17.8	19.3	19.7	19.9	19.9	19.9	20.0	20.1	20.1	20.1	20.2
≥ 18000		11.5	12.7	14.4	17.5	18.1	19.7	20.0	20.2	20.2	20.2	20.3	20.4	20.4	20.4	20.5
≥ 16000		11.5	12.7	14.4	17.5	18.1	19.7	20.0	20.2	20.2	20.2	20.3	20.4	20.4	20.4	20.6
≥ 14000		11.5	12.8	14.6	17.9	18.4	20.0	20.3	20.6	20.6	20.6	20.7	20.8	20.8	20.8	20.9
≥ 12000		12.1	13.5	15.3	19.0	19.6	21.1	21.5	21.7	21.7	21.7	21.8	21.9	21.9	21.9	22.0
≥ 10000		13.7	15.2	17.2	21.2	21.8	23.4	23.7	23.9	23.9	23.9	24.0	24.1	24.1	24.1	24.2
≥ 9000		14.2	15.8	17.8	22.0	22.6	24.4	24.7	24.7	24.9	24.9	25.0	25.1	25.1	25.1	25.3
≥ 8000		15.3	16.9	18.9	23.2	23.8	25.6	25.9	26.1	26.1	26.1	26.3	26.4	26.4	26.4	26.5
≥ 7000		16.0	17.8	19.9	24.5	25.0	26.9	27.5	27.7	27.7	27.7	27.8	27.9	27.9	27.9	28.0
≥ 6000		17.4	19.2	21.6	26.5	27.2	29.1	29.6	29.8	29.8	29.8	29.9	30.1	30.1	30.1	30.1
≥ 5000		20.4	23.0	25.6	31.2	32.1	34.1	34.7	35.0	35.0	35.0	35.1	35.2	35.2	35.2	35.3
≥ 4500		23.8	26.4	29.3	35.5	36.4	38.8	39.4	39.7	39.7	39.7	39.8	39.9	39.9	39.9	40.0
≥ 4000		26.8	30.2	33.4	40.1	41.0	43.4	44.4	44.6	44.6	44.6	44.7	44.8	44.8	44.8	44.9
≥ 3500		29.1	33.0	36.9	43.8	45.0	48.0	49.4	49.7	49.7	49.7	49.8	49.9	49.9	49.9	50.1
≥ 3000		30.4	34.7	39.6	47.2	48.5	51.7	53.5	53.9	53.9	53.9	54.0	54.1	54.1	54.1	54.2
≥ 2500		32.2	36.8	42.1	51.4	53.5	56.9	59.0	59.3	59.3	59.3	59.4	59.6	59.6	59.6	59.7
≥ 2000		35.4	40.9	47.2	56.9	59.3	63.1	65.4	65.7	65.7	65.7	65.8	65.9	65.9	65.9	66.0
≥ 1800		36.6	42.1	49.1	59.6	62.1	65.9	68.2	68.5	68.5	68.6	68.7	68.8	68.8	68.8	68.9
≥ 1500		38.4	44.2	52.0	63.2	66.5	70.4	73.1	73.4	73.4	73.5	73.6	73.7	73.7	73.7	73.9
≥ 1200		39.7	46.0	55.0	67.0	70.4	74.3	77.3	77.7	77.7	77.9	78.0	78.1	78.1	78.1	78.2
≥ 1000		40.1	46.8	56.4	69.4	72.7	77.1	80.9	81.2	81.2	81.5	81.6	81.7	81.7	81.7	81.8
≥ 900		40.1	47.0	56.8	69.9	73.3	77.9	81.8	82.1	82.2	82.5	82.6	82.7	82.7	82.7	82.8
≥ 800		40.2	47.3	57.0	70.7	74.3	79.1	83.4	84.0	84.1	84.4	84.5	84.6	84.6	84.6	84.7
≥ 700		40.3	47.4	57.3	72.1	76.0	81.3	85.8	86.5	86.6	86.8	86.9	87.0	87.0	87.0	87.2
≥ 600		40.3	47.5	57.9	73.2	77.3	82.9	87.8	88.7	88.8	89.1	89.2	89.3	89.3	89.3	89.4
≥ 500		40.4	47.7	58.2	74.4	78.8	84.9	89.9	90.9	91.1	91.3	91.4	91.5	91.5	91.5	91.6
≥ 400		40.4	47.7	58.4	74.6	79.4	85.9	91.2	92.4	92.6	92.8	92.9	93.1	93.1	93.1	93.2
≥ 300		40.4	47.7	58.4	74.9	79.7	85.8	92.7	94.3	94.5	94.9	95.0	95.1	95.1	95.1	95.2
≥ 200		40.4	47.7	58.4	74.9	79.9	86.0	93.1	95.0	95.9	96.3	96.5	96.6	96.6	96.9	97.1
≥ 100		40.4	47.7	58.4	74.9	79.9	86.0	93.1	95.0	95.9	96.5	96.9	97.2	97.8	98.1	99.2
≥ 0		40.4	47.7	58.4	74.9	79.9	86.0	93.1	95.0	95.9	96.5	96.9	97.4	98.0	98.4	100.0

TOTAL NUMBER OF OBSERVATIONS

895

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHIN-MAIN APT GERMANY/FRANKFURT
ST OR NAME

07-76
YEAR

5FL
MOON

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0600-0800
HOURS LST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2½	≥ 2	≥ 1½	≥ 1¼	≥ 1	≥ ¾	≥ ½	≥ ¼	≥ 1/8	≥ 1/16	≥ 0
NO CEILING		10.1	10.7	12.2	13.7	14.9	16.7	18.7	19.0	19.1	19.1	19.1	19.4	19.4	19.5	19.6
IV 20000		11.1	12.0	13.9	15.8	16.9	18.7	20.7	21.1	21.3	21.3	21.3	21.5	21.5	21.6	21.7
IV 18000		11.1	12.0	13.9	15.8	16.9	18.7	20.7	21.1	21.3	21.3	21.3	21.5	21.5	21.6	21.7
IV 16000		11.1	12.0	13.9	15.8	16.9	18.7	20.7	21.1	21.3	21.3	21.3	21.5	21.5	21.6	21.7
IV 14000		11.1	12.2	14.2	16.1	17.5	19.4	21.4	21.7	22.0	22.0	22.0	22.2	22.2	22.3	22.4
IV 12000		11.3	12.4	14.9	17.0	19.4	20.3	22.4	22.7	23.0	23.0	23.0	23.2	23.2	23.3	23.4
IV 10000		12.2	13.4	16.1	18.5	19.8	21.8	24.0	24.3	24.5	24.5	24.5	24.8	24.8	24.9	25.0
IV 9000		12.5	13.9	16.6	19.1	20.6	22.7	25.0	25.3	25.6	25.6	25.6	25.8	25.8	25.9	26.0
IV 8000		12.8	14.2	16.9	19.0	21.1	23.2	25.5	25.8	26.0	26.0	26.0	26.2	26.2	26.4	26.5
IV 7000		13.5	15.0	17.8	20.6	22.2	24.3	26.7	27.0	27.3	27.3	27.3	27.5	27.5	27.6	27.7
IV 6000		14.4	16.0	18.9	21.7	23.6	25.8	28.3	28.6	28.8	28.8	28.8	28.9	29.1	29.2	29.3
IV 5000		16.0	18.0	21.3	24.5	27.4	29.6	32.3	32.7	32.9	32.9	32.9	33.1	33.1	33.2	33.3
IV 4500		18.6	20.7	24.4	28.4	31.4	33.8	36.6	36.9	37.2	37.2	37.2	37.4	37.4	37.5	37.6
IV 4000		21.7	24.0	28.0	32.9	36.0	38.6	42.0	42.3	42.7	42.7	42.7	42.9	42.9	43.0	43.1
IV 3500		24.2	26.8	31.0	36.7	40.0	42.8	46.7	47.2	47.5	47.7	47.7	48.0	48.0	48.1	48.2
IV 3000		25.9	28.7	33.3	39.6	43.4	46.2	50.7	51.1	51.6	51.8	51.8	52.0	52.0	52.1	52.3
IV 2500		27.7	31.0	36.4	43.6	47.5	50.5	55.2	55.7	56.2	56.4	56.4	56.6	56.6	56.8	56.9
IV 2000		30.3	33.8	39.4	47.2	51.5	54.5	60.2	61.3	61.7	61.9	61.9	62.2	62.2	62.3	62.4
IV 1800		31.5	35.1	41.3	49.4	53.8	56.9	62.7	63.7	64.2	64.4	64.4	64.6	64.6	64.8	64.9
IV 1500		33.4	37.3	44.1	53.7	58.8	61.8	68.2	69.4	69.8	70.0	70.0	70.3	70.3	70.4	70.5
IV 1200		35.1	39.5	47.6	58.3	63.7	67.1	73.9	75.0	75.5	75.7	75.7	75.9	75.9	76.0	76.1
IV 1000		35.4	40.1	48.5	60.5	65.9	69.5	76.6	77.7	78.2	78.4	78.4	78.6	78.6	78.7	78.8
IV 900		35.5	40.2	48.6	60.9	66.3	69.9	77.3	78.4	78.8	79.1	79.1	79.3	79.3	79.4	79.5
IV 800		35.5	40.2	49.0	61.7	67.6	71.5	78.9	80.3	80.7	81.0	81.0	81.2	81.2	81.3	81.4
IV 700		35.6	40.3	49.3	62.4	68.5	72.7	80.7	82.1	82.9	83.1	83.1	83.3	83.3	83.4	83.6
IV 600		35.6	40.5	49.5	64.0	70.3	74.9	83.8	85.4	86.4	86.7	86.8	87.0	87.0	87.2	87.3
IV 500		35.6	40.5	49.9	64.8	71.3	76.0	86.0	87.2	89.2	89.5	89.6	89.9	89.9	90.0	90.1
IV 400		35.6	40.5	50.0	65.0	71.5	76.6	87.3	89.5	91.2	91.8	91.9	92.1	92.1	92.2	92.3
IV 300		35.6	40.5	50.0	65.0	71.6	77.1	88.4	91.2	93.1	93.9	94.1	94.4	94.6	94.7	94.8
IV 200		35.6	40.5	50.0	65.0	71.6	77.1	88.5	91.4	93.9	94.9	95.2	95.4	96.2	96.4	96.6
IV 100		35.6	40.5	50.0	65.0	71.6	77.1	88.5	91.4	93.9	95.2	95.5	95.9	97.1	97.5	98.4
IV 0		35.6	40.5	50.0	65.0	71.6	77.1	88.5	91.4	93.9	95.4	95.6	96.4	96.6	96.8	96.9

TOTAL NUMBER OF OBSERVATIONS 888

2

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032 RHEIN-MAIN APT GERMANY/FRANKFURT

07-76

UFC

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

0900-1100
HOURS LST

CEILING (FEET)	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1¼	≥1	≥¾	≥½	≥¼	≥1/10	≥1/16	≥0
NO CEILING ≥ 20000		8.8	9.2	10.9	13.3	14.7	16.3	18.0	18.3	18.4	18.7	18.8	19.8	18.9	18.9	18.9
≥ 18000		11.4	12.0	15.3	18.2	20.0	21.7	23.9	24.4	24.6	24.6	25.0	25.0	25.3	25.3	25.3
≥ 16000		11.4	12.0	15.3	18.2	20.0	21.7	23.9	24.4	24.6	24.6	25.0	25.0	25.3	25.3	25.3
≥ 14000		11.7	12.3	15.6	18.5	20.3	22.0	24.3	24.7	24.9	25.1	25.4	25.4	25.6	25.6	25.6
≥ 12000		12.3	12.8	16.3	19.2	21.1	22.8	25.4	25.9	26.1	26.4	26.6	26.6	26.8	26.8	26.8
≥ 10000		13.0	13.5	17.3	20.3	22.3	24.4	27.3	27.0	28.0	28.3	28.5	28.6	28.8	28.8	28.8
≥ 8000		13.5	14.1	18.1	21.3	23.4	25.4	28.3	28.8	29.1	29.3	29.5	29.6	29.8	29.8	29.8
≥ 7000		14.0	14.5	18.5	22.1	24.5	26.5	29.4	29.9	30.2	30.4	30.6	30.7	30.9	30.9	30.9
≥ 6000		14.9	15.5	19.7	23.0	26.4	28.6	31.5	32.1	32.3	32.5	32.7	32.8	33.1	33.1	33.1
≥ 5000		17.0	18.5	22.8	27.5	30.5	32.8	36.0	36.5	36.8	37.0	37.2	37.3	37.5	37.5	37.5
≥ 4500		19.1	20.3	24.6	29.8	33.1	35.6	38.9	39.4	39.7	39.9	40.1	40.2	40.4	40.4	40.4
≥ 4000		21.0	22.6	27.0	33.0	36.8	39.7	43.1	43.8	44.2	44.5	44.8	44.9	45.1	45.1	45.1
≥ 3500		22.0	24.6	29.2	36.1	40.4	44.2	48.3	49.1	49.7	50.1	50.4	50.5	50.7	50.7	50.7
≥ 3000		24.5	26.9	31.7	39.4	44.0	48.2	52.8	54.3	55.2	55.6	56.0	56.1	56.3	56.3	56.3
≥ 2500		26.6	29.2	34.4	42.3	47.0	51.3	56.2	57.9	58.8	59.2	59.6	59.7	59.9	59.9	59.9
≥ 2000		27.9	30.9	36.3	44.7	49.9	54.5	60.4	62.2	63.1	63.6	63.9	64.0	64.2	64.2	64.2
≥ 1800		28.7	32.0	37.7	46.4	51.8	56.2	62.8	64.6	65.5	65.9	66.3	66.4	66.6	66.6	66.6
≥ 1500		30.4	33.9	40.2	49.9	55.6	60.3	67.9	70.1	71.3	71.7	72.1	72.2	72.4	72.4	72.4
≥ 1200		31.7	35.6	42.9	54.0	59.9	64.9	73.6	76.0	77.3	77.8	78.1	78.2	78.4	78.4	78.4
≥ 1000		32.3	36.2	43.8	55.2	61.6	66.7	76.1	78.5	80.1	80.6	80.9	81.0	81.2	81.2	81.2
≥ 900		32.3	36.2	44.0	55.5	61.9	67.3	77.1	79.6	81.1	81.6	81.9	82.0	82.2	82.2	82.2
≥ 800		32.4	36.3	44.4	55.5	62.9	68.4	78.5	81.0	82.7	83.1	83.6	83.7	83.9	83.9	83.9
≥ 700		32.4	36.3	44.7	57.4	63.8	69.7	80.6	83.1	84.8	85.3	85.7	85.8	86.0	86.0	86.0
≥ 600		32.6	36.5	45.0	58.5	64.9	71.1	82.5	85.7	87.5	87.9	88.4	88.6	88.9	88.9	88.9
≥ 500		32.6	36.5	45.1	58.9	65.3	71.6	83.8	87.3	89.4	89.9	90.4	90.9	91.3	91.3	91.3
≥ 400		32.6	36.5	45.2	59.0	65.4	72.0	84.6	88.5	91.2	91.8	93.0	93.4	93.7	93.7	93.7
≥ 300		32.6	36.5	45.3	59.0	65.4	72.0	84.8	89.1	92.4	93.3	94.6	95.2	96.0	96.0	96.1
≥ 200		32.6	36.5	45.3	59.0	65.4	72.0	84.9	89.2	92.7	93.7	95.2	96.0	97.2	97.2	97.3
≥ 100		32.6	36.5	45.3	59.0	65.4	72.0	84.9	89.2	92.7	93.7	95.2	96.1	97.5	97.5	98.1
≥ 0		32.6	36.5	45.3	59.0	65.4	72.0	84.9	89.2	92.7	93.7	95.5	96.4	98.2	98.7	100.0

TOTAL NUMBER OF OBSERVATIONS 895

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/HAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

DEC
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1200-1400
HOURS LST

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥10	≥6	≥5	≥4	≥3	≥2.5	≥2	≥1.5	≥1.4	≥1	≥.9	≥.8	≥.7	≥.6	≥.5	≥.4
NO CEILING		9.4	10.3	11.7	13.7	14.4	14.8	15.2	16.3	16.6	16.8	16.9	16.8	15.9	16.7	16.9
≥ 20000		12.2	13.7	15.8	18.8	19.7	20.5	22.0	22.1	22.6	22.9	22.9	22.9	23.0	23.0	23.0
≥ 18000		12.2	13.7	15.8	18.8	19.7	20.5	22.0	22.1	22.6	22.9	22.9	22.9	23.0	23.0	23.0
≥ 16000		12.2	13.7	15.8	18.8	19.7	20.5	22.0	22.1	22.6	22.9	22.9	22.9	23.0	23.0	23.0
≥ 14000		12.8	14.3	16.6	19.7	20.6	21.4	22.9	23.0	23.5	23.8	23.8	23.8	23.9	23.9	23.9
≥ 12000		13.6	15.1	17.9	21.2	22.3	23.1	24.6	24.7	25.2	25.5	25.5	25.5	25.7	25.7	25.7
≥ 10000		14.5	16.0	19.0	23.3	24.4	25.3	26.8	27.1	27.6	27.9	27.9	27.9	28.1	28.1	28.1
≥ 9000		15.3	16.9	20.2	24.5	25.7	26.6	28.2	28.5	29.1	29.4	29.4	29.4	29.5	29.5	29.5
≥ 8000		15.8	17.4	20.8	25.4	26.6	27.5	29.1	29.4	30.1	30.4	30.6	30.6	30.7	30.7	30.7
≥ 7000		16.0	17.6	21.1	26.1	27.3	28.2	29.8	30.2	30.9	31.2	31.4	31.4	31.5	31.5	31.5
≥ 6000		16.6	18.3	22.1	27.7	29.0	30.1	31.8	32.4	33.2	33.5	33.6	33.6	33.8	33.8	33.8
≥ 5000		19.0	21.2	25.2	31.5	32.8	34.0	35.8	36.4	37.3	37.8	37.7	37.7	37.9	37.9	37.9
≥ 4500		19.8	22.0	26.0	32.7	34.1	35.5	37.4	38.0	38.9	39.2	39.3	39.3	39.5	39.5	39.5
≥ 4000		23.0	25.4	29.6	37.3	38.8	40.3	42.8	43.6	44.7	45.0	45.2	45.2	45.3	45.3	45.3
≥ 3500		24.5	27.0	31.8	40.4	42.4	44.0	46.6	47.7	48.9	49.3	49.4	49.4	49.5	49.5	49.5
≥ 3000		28.6	31.8	37.2	46.5	49.4	51.1	54.0	55.4	56.8	57.1	57.2	57.2	57.4	57.4	57.4
≥ 2500		31.5	35.1	40.9	50.4	53.7	55.8	59.3	60.8	62.4	62.7	62.8	62.8	62.9	62.9	62.9
≥ 2000		33.4	37.2	43.2	53.1	56.7	59.3	63.3	65.0	66.6	66.9	67.0	67.0	67.2	67.2	67.2
≥ 1800		35.1	39.0	45.5	56.1	59.6	62.3	66.2	68.0	69.6	70.0	70.1	70.1	70.2	70.2	70.2
≥ 1500		36.1	40.1	47.8	59.0	62.7	65.7	70.7	72.4	74.3	74.8	74.9	74.9	75.1	75.1	75.1
≥ 1200		37.5	42.2	50.7	62.9	66.9	70.5	75.9	77.8	79.7	80.3	80.4	80.4	80.6	80.6	80.6
≥ 1000		38.0	42.6	51.8	65.2	69.2	73.0	78.9	80.7	82.8	83.6	83.8	83.8	84.0	84.0	84.0
≥ 900		38.0	42.6	52.0	65.6	69.6	73.8	79.9	81.8	83.8	84.6	84.9	85.1	85.3	85.3	85.3
≥ 800		38.0	42.6	52.2	66.8	70.8	75.4	82.0	84.2	86.3	87.1	87.5	87.6	87.8	87.8	87.8
≥ 700		38.0	42.6	53.2	68.3	72.3	76.9	84.0	86.4	89.3	90.1	90.4	90.5	90.8	90.8	90.8
≥ 600		38.0	42.6	53.2	68.4	72.4	77.1	84.7	87.3	90.3	91.2	91.7	91.9	92.2	92.2	92.2
≥ 500		38.0	42.6	53.4	68.8	72.7	77.8	86.0	88.8	92.2	93.6	93.8	94.2	94.2	94.2	94.2
≥ 400		38.0	42.6	53.4	68.8	72.9	78.0	86.7	89.6	94.0	95.1	95.7	96.0	96.4	96.4	96.4
≥ 300		38.0	42.6	53.4	68.8	72.9	78.0	86.7	89.6	94.1	95.2	96.4	96.8	97.1	97.1	97.1
≥ 200		38.0	42.6	53.4	68.8	72.9	78.0	86.7	89.6	94.2	95.3	96.5	96.9	97.5	97.7	97.7
≥ 100		38.0	42.6	53.4	68.8	72.9	78.0	86.7	89.6	94.2	95.3	96.5	96.9	97.6	97.9	98.5
≥ 0		38.0	42.6	53.4	68.8	72.9	78.0	86.7	89.6	94.2	95.4	96.6	97.3	99.1	99.4	100.0

TOTAL NUMBER OF OBSERVATIONS

877

USAF ETAC

FORM
JUL 64

G-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

57-76
YEARS

JE
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1500-1700
HOURS LT

CEILING (FEET)	VISIBILITY STATUTE MILES															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1	≥¾	≥½	≥¼	≥⅓	≥⅕	≥⅒	≥0
NO CEILING		10.9	12.0	13.8	15.0	15.9	16.7	18.7	18.5	18.8	19.0	19.7	19.0	19.2	19.2	19.2
≥ 20000		14.5	15.7	17.9	19.7	20.8	22.3	24.1	24.5	24.9	25.3	25.3	25.3	25.4	25.4	25.4
IV 18000		14.5	15.7	17.9	19.7	20.8	22.3	24.1	24.5	24.9	25.3	25.3	25.3	25.4	25.4	25.4
IV 16000		14.5	15.7	17.9	19.7	20.8	22.3	24.1	24.5	24.9	25.3	25.3	25.3	25.4	25.4	25.4
IV 14000		14.7	15.0	18.3	20.0	21.3	22.7	24.5	24.9	25.4	25.7	25.7	25.7	25.8	25.8	25.8
IV 12000		15.5	16.8	19.4	21.8	23.5	24.9	26.8	27.3	27.7	28.1	28.1	28.1	28.2	28.2	28.2
IV 10000		16.7	18.0	21.0	23.9	25.8	27.3	29.3	29.7	30.2	30.5	30.5	30.5	30.6	30.6	30.6
IV 9000		16.9	18.4	21.5	24.5	26.5	28.1	30.1	30.5	31.0	31.3	31.3	31.3	31.4	31.4	31.4
IV 8000		17.3	18.7	22.0	25.2	27.2	28.8	31.0	31.4	31.8	32.2	32.2	32.2	32.3	32.3	32.3
IV 7000		17.3	18.8	22.7	25.8	27.8	29.5	31.6	32.1	32.5	32.9	32.9	32.9	33.0	33.0	33.0
IV 6000		18.0	19.8	23.7	27.1	29.2	30.8	33.2	33.6	34.2	34.5	34.5	34.5	34.6	34.6	34.6
IV 5000		19.9	22.0	26.1	30.2	32.4	34.5	37.1	37.5	38.1	38.4	38.4	38.4	38.5	38.5	38.5
IV 4500		21.3	23.7	27.8	32.2	34.5	36.6	39.2	39.6	40.2	40.5	40.5	40.5	40.6	40.6	40.6
IV 4000		24.8	28.1	32.3	37.3	39.9	42.2	45.4	45.9	46.7	47.0	47.0	47.0	47.1	47.1	47.1
IV 3500		27.4	31.1	35.7	41.2	44.1	46.7	50.2	50.7	51.4	51.8	51.8	51.8	51.9	51.9	51.9
IV 3000		30.5	34.5	39.6	46.2	49.9	52.8	56.8	57.6	58.4	58.7	58.7	58.7	58.8	58.8	58.8
IV 2500		33.0	37.2	43.3	50.4	54.2	57.2	61.4	62.2	63.1	63.5	63.5	63.5	63.6	63.6	63.6
IV 2000		35.3	40.4	47.1	55.0	58.8	62.7	67.1	68.4	69.5	69.8	69.8	69.8	69.9	69.9	69.9
IV 1800		36.2	41.6	49.0	57.5	61.2	65.1	69.9	71.2	72.3	72.7	72.7	72.7	72.8	72.8	72.8
IV 1500		37.5	43.5	51.3	60.4	64.3	68.4	73.7	75.2	76.5	76.9	76.9	76.9	77.1	77.1	77.1
IV 1200		38.3	44.9	53.5	63.6	67.7	72.4	78.5	80.1	81.4	82.0	82.0	82.0	82.1	82.1	82.1
IV 1000		38.6	45.4	54.7	65.8	70.3	75.8	82.3	83.9	85.3	85.9	85.9	85.9	86.0	86.0	86.0
IV 900		38.6	45.4	54.9	66.3	70.8	76.4	83.1	84.9	86.4	87.0	87.0	87.0	87.1	87.1	87.1
IV 800		38.6	45.4	55.5	67.0	71.7	78.0	85.0	87.0	89.0	89.5	89.5	89.5	89.6	89.6	89.6
IV 700		38.8	45.7	55.9	67.8	72.8	79.1	86.3	88.3	90.4	91.0	91.0	91.0	91.1	91.1	91.1
IV 600		38.8	45.7	56.1	68.9	74.2	80.5	88.1	90.4	92.5	93.1	93.1	93.1	93.2	93.2	93.2
IV 500		38.8	45.7	56.1	68.9	74.2	80.5	88.5	91.1	93.4	94.1	94.1	94.1	94.3	94.3	94.3
IV 400		38.8	45.7	56.1	68.9	74.2	80.7	89.1	92.1	94.9	95.8	96.0	96.0	96.2	96.2	96.2
IV 300		38.8	45.7	56.1	68.9	74.2	80.8	89.2	92.3	95.7	96.5	96.9	96.9	97.3	97.3	97.3
IV 200		38.8	45.7	56.1	68.9	74.2	80.8	89.2	92.4	96.0	97.4	97.9	97.9	98.4	98.4	98.4
IV 100		38.8	45.7	56.1	68.9	74.2	80.8	89.2	92.4	96.0	97.4	97.9	97.9	98.0	98.0	98.0
IV 0		38.8	45.7	56.1	68.9	74.2	80.8	89.2	92.4	96.0	97.4	98.0	98.0	98.3	99.6	100.0

TOTAL NUMBER OF OBSERVATIONS 898

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

07-76
YEARS

DEC
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

1500-2000
HOURS

CEILING FEET	VISIBILITY (STATUTE MILES)															
	≥ 10	≥ 6	≥ 5	≥ 4	≥ 3	≥ 2.5	≥ 2	≥ 1.5	≥ 1	≥ .5	≥ .3	≥ .2	≥ .15	≥ .1	≥ .05	≥ 0
NO CEILING		12.9	13.7	17.8	21.6	22.4	23.1	23.7	24.2	24.4	24.4	24.4	24.5	24.7	24.7	24.9
≥ 20000		14.8	15.9	20.3	24.3	25.6	26.3	27.1	27.5	27.7	27.7	27.7	27.9	28.0	28.0	28.2
≥ 18000		14.8	15.9	20.3	24.3	25.6	26.3	27.1	27.5	27.7	27.7	27.7	27.9	28.0	28.0	28.2
IV 16000		14.8	15.9	20.3	24.3	25.6	26.3	27.1	27.5	27.7	27.7	27.7	27.9	28.0	28.0	28.2
IV 14000		15.5	16.6	21.0	25.1	26.4	27.1	27.9	28.3	28.5	28.5	28.5	28.7	28.8	28.8	29.0
IV 12000		16.3	17.4	22.0	26.3	27.6	28.3	29.2	29.7	29.9	29.9	29.9	30.0	30.1	30.1	30.4
IV 10000		16.6	17.7	22.7	27.4	28.8	29.5	30.4	30.8	31.1	31.1	31.1	31.2	31.3	31.3	31.5
IV 9000		17.2	18.5	23.6	28.4	30.0	30.7	31.6	32.1	32.3	32.3	32.3	32.4	32.5	32.5	32.6
IV 8000		17.6	18.9	24.1	29.0	30.6	31.3	32.2	32.6	32.9	32.9	32.9	33.0	33.1	33.1	33.3
IV 7000		18.5	19.9	25.2	30.3	31.9	32.5	33.4	33.9	34.1	34.1	34.1	34.2	34.4	34.4	34.6
IV 6000		20.1	21.8	27.3	32.3	33.9	34.6	35.5	36.0	36.2	36.2	36.2	36.3	36.4	36.4	36.6
IV 5000		22.5	24.2	29.7	35.2	36.8	37.6	38.6	39.0	39.3	39.3	39.3	39.4	39.5	39.5	39.7
IV 4500		24.5	26.3	32.2	38.1	39.8	40.8	42.2	42.7	42.9	42.9	42.9	43.0	43.2	43.2	43.4
IV 4000		26.8	28.7	34.6	40.6	42.4	43.3	45.0	45.4	45.7	45.7	45.7	45.8	45.9	45.9	46.1
IV 3500		29.3	31.6	38.1	44.9	46.8	47.7	49.4	49.9	50.2	50.2	50.2	50.3	50.5	50.5	50.7
IV 3000		31.5	34.2	41.6	49.2	51.4	52.4	54.9	55.6	55.9	55.9	55.9	56.1	56.2	56.2	56.4
IV 2500		34.4	37.8	46.3	54.3	56.8	58.1	60.6	61.3	61.6	61.6	61.6	61.8	61.9	61.9	62.1
IV 2000		37.4	41.6	51.5	60.4	63.2	64.8	67.7	68.5	68.8	68.8	68.8	68.9	69.1	69.1	69.3
IV 1800		38.6	42.8	53.3	62.4	65.3	66.9	69.9	70.7	71.0	71.0	71.0	71.1	71.2	71.2	71.5
IV 1500		40.4	45.5	56.6	66.9	70.3	72.3	75.5	76.4	76.8	76.8	76.8	76.9	77.1	77.1	77.3
IV 1200		41.7	46.9	59.0	70.9	74.4	76.6	80.5	81.4	81.8	81.8	81.8	82.0	82.1	82.1	82.3
IV 1000		42.0	47.5	60.0	72.7	76.5	79.1	83.7	84.8	85.3	85.3	85.3	85.4	85.5	85.5	85.7
IV 900		42.0	47.6	60.3	73.5	77.4	80.3	84.8	86.0	86.4	86.4	86.4	86.5	86.6	86.6	86.9
IV 800		42.2	47.8	61.0	74.4	78.3	81.6	86.4	87.7	88.1	88.1	88.1	88.2	88.4	88.4	88.6
IV 700		42.2	48.1	61.5	75.1	79.5	83.0	88.0	89.5	90.0	90.0	90.0	90.1	90.2	90.2	90.4
IV 600		42.2	48.1	61.9	76.1	80.5	84.1	89.4	90.9	91.3	91.3	91.3	91.4	91.6	91.6	91.8
IV 500		42.2	48.1	62.1	76.8	81.6	85.6	91.4	93.0	93.5	93.5	93.5	93.6	93.7	93.7	93.9
IV 400		42.2	48.1	62.1	76.8	81.7	85.7	91.9	93.7	94.5	94.5	94.5	94.6	94.7	94.7	95.0
IV 300		42.2	48.1	62.1	76.8	81.7	85.7	92.5	94.5	96.5	96.7	96.7	96.8	96.9	96.9	97.1
IV 200		42.2	48.1	62.1	76.8	81.7	86.0	92.5	94.7	97.0	97.4	97.4	97.5	97.7	97.7	97.9
IV 100		42.2	48.1	62.1	76.8	81.7	86.0	92.5	94.7	97.0	97.6	97.7	98.2	98.9	99.0	99.3
IV 0		42.2	48.1	62.1	76.8	81.7	86.0	92.5	94.7	97.0	97.7	97.8	98.4	99.3	99.5	100.0

TOTAL NUMBER OF OBSERVATIONS

876

USAF ETAC

FORM
JUL 64

0-14-5 (OL A) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/HAC

CEILING VERSUS VISIBILITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
YEARS

GEN
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

2100-2300
HOURS LST

CEILING (FEET)	VISIBILITY STATUTE MILES															
	≥10	≥6	≥5	≥4	≥3	≥2½	≥2	≥1½	≥1	≥¾	≥½	≥¼	≥⅓	≥⅒	≥⅑	≥0
NO CEILING		12.2	13.6	16.9	21.0	21.0	22.3	23.0	23.0	23.8	23.8	23.8	23.8	23.9	24.0	24.0
≥ 20000		13.0	14.5	18.0	22.5	23.6	24.0	24.7	25.3	25.5	25.5	25.5	25.5	25.6	25.7	25.7
≥ 18000		13.2	14.7	18.4	23.0	24.1	24.4	25.1	25.8	25.9	25.9	25.9	25.9	26.0	26.1	26.1
IV 16000		13.2	14.7	18.4	23.0	24.1	24.4	25.1	25.8	25.9	25.9	25.9	25.9	26.0	26.1	26.1
IV 14000		13.3	14.8	18.6	23.2	24.3	24.7	25.3	26.0	26.1	26.1	26.1	26.1	26.2	26.4	26.4
IV 12000		13.8	15.3	19.1	23.8	24.9	25.2	25.9	26.6	26.7	26.7	26.7	26.7	26.8	26.9	26.9
IV 10000		14.9	16.6	20.8	25.9	27.1	27.8	28.5	29.2	29.3	29.3	29.3	29.3	29.4	29.5	29.5
IV 9000		15.6	17.4	21.6	26.7	28.1	28.7	29.4	30.1	30.2	30.2	30.2	30.2	30.3	30.4	30.4
IV 8000		16.2	18.1	22.3	27.4	28.8	29.5	30.2	30.9	31.0	31.0	31.0	31.0	31.1	31.2	31.2
IV 7000		17.2	19.1	23.4	28.6	30.1	30.8	31.4	32.1	32.2	32.2	32.2	32.2	32.4	32.5	32.5
IV 6000		19.2	21.4	26.2	31.4	32.9	33.6	34.3	35.1	35.2	35.2	35.2	35.2	35.3	35.4	35.4
IV 5000		20.8	23.1	28.1	33.6	35.4	36.7	37.4	38.7	38.3	38.3	38.3	38.3	38.5	38.6	38.6
IV 4500		23.2	25.6	30.9	37.0	38.8	40.0	40.8	41.6	41.7	41.7	41.7	41.7	41.9	42.0	42.0
IV 4000		25.2	27.7	33.4	40.2	42.0	43.2	44.0	44.8	44.5	44.5	44.5	44.5	44.9	45.0	45.1
IV 3500		28.3	30.8	37.2	44.6	46.7	48.1	48.9	49.7	49.8	49.8	49.8	49.8	49.9	50.0	50.0
IV 3000		31.1	33.7	40.6	49.0	51.4	53.2	54.4	55.5	55.8	55.8	55.8	55.8	55.9	56.0	56.0
IV 2500		33.6	36.7	44.1	53.1	55.8	57.8	59.3	60.4	60.5	60.5	60.5	60.5	60.7	60.9	60.9
IV 2000		37.6	40.8	49.4	60.2	63.3	65.5	67.3	68.4	68.7	68.7	68.7	68.7	68.8	68.9	68.9
IV 1800		39.4	42.9	51.5	63.0	66.5	68.8	70.8	72.1	72.3	72.3	72.3	72.3	72.4	72.5	72.5
IV 1500		41.7	45.8	55.7	67.3	71.3	73.5	75.7	77.1	77.5	77.5	77.5	77.5	77.6	77.7	77.7
IV 1200		43.0	47.1	57.1	69.9	74.4	76.9	79.1	80.8	81.2	81.2	81.2	81.2	81.3	81.4	81.4
IV 1000		43.2	47.4	58.3	71.7	76.7	79.3	82.2	84.2	84.7	84.7	84.7	84.7	84.8	85.0	85.0
IV 900		43.4	47.6	58.6	72.2	77.3	80.2	83.0	85.1	85.6	85.6	85.6	85.6	85.7	85.9	85.9
IV 800		43.7	47.9	59.3	73.5	79.1	82.5	85.5	87.7	88.2	88.2	88.2	88.2	88.3	88.5	88.5
IV 700		43.7	47.9	59.4	74.0	79.9	83.5	86.8	88.9	89.3	89.5	89.5	89.5	89.6	89.7	89.7
IV 600		43.7	48.0	59.5	74.4	80.4	84.5	88.2	90.4	91.0	91.0	91.0	91.0	91.1	91.2	91.2
IV 500		43.7	48.0	60.2	75.5	81.8	86.1	90.5	92.8	93.3	93.3	93.3	93.3	93.4	93.6	93.6
IV 400		43.7	48.0	60.2	75.7	82.2	86.8	91.5	93.9	94.6	94.6	94.6	94.6	94.7	94.8	94.8
IV 300		43.7	48.0	60.2	75.8	82.4	87.0	92.1	94.9	95.4	95.4	95.4	95.4	95.9	97.1	97.1
IV 200		43.7	48.0	60.2	75.8	82.4	87.0	92.5	95.4	96.9	97.6	97.6	97.6	97.7	97.9	97.9
IV 100		43.7	48.0	60.2	75.8	82.4	87.0	92.5	95.4	97.1	97.9	98.1	98.1	98.3	98.3	98.3
IV 0		43.7	48.0	60.2	75.8	82.4	87.0	92.5	95.4	97.1	98.0	98.2	98.4	98.6	99.1	100.0

TOTAL NUMBER OF OBSERVATIONS

884

SKY COVER SUMMARY

The individual increments formerly reported in total sky cover of airways observations are no longer available from the source data from Jan 71 and later. Increments reported after 1970 are clear, scattered, broken, overcast, partial obscuration and obscured (0, 3, 9, or 10). Therefore, the sky cover summary for this station is limited to the period through Dec 70.

PART D

SKY COVER

This summary is prepared from hourly observations and is a percentage frequency distribution of total sky cover by tenths, plus mean sky cover, and total number of observations. It is presented in two tables as follows:

1. By month and annual - all hours and all years combined.
2. By month - by standard 3-hour groups.

NOTE: # 1: Sky cover (total cloud amount) was not reported by U. S. Services until mid 1945. Data, when available, were punched for Air Force stations beginning in 1946, but were not available for Navy stations until 1948 or 1949. Weather Bureau stations recorded total cloud amount in remarks beginning sometime in 1945, but few stations have punched data prior to 1948. This summary will, of course, be limited to period of available data.

NOTE: # 2: Some sources of punched data used for this summary report cloud amounts in oktas. These have been converted to tenths prior to summarizing, and notation is made on the form to indicate that data were originally reported in oktas. The manner of conversion is given below:

<u>OKTAS</u>	<u>TENTHS</u>
0	0
1	1
2	3
3	4
4	5
5	6
6	8
7	9
8 (or obscured)	10

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SKY COVER

35032
STATION

RHEIN-MAIN APT GERMANY/FRA NKFRT
STATION NAME

67-70
PERIOD

ALL
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L S F.)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER											MEAN TENTHS OF SKY COVER	TOTAL NO. OF OBS
		0	1	2	3	4	5	6	7	8	9	10		
JAN	ALL	5.9	2.0		2.7	2.7	2.5	3.3		6.0	21.8	53.3	8.3	2976
FEB		12.2	4.4		4.1	3.6	4.0	5.3		8.6	18.3	39.7	7.1	27.2
MAR		11.0	5.2		4.8	6.0	4.5	0.6		8.9	20.2	32.2	6.8	2976
APR		12.3	7.7		6.4	6.4	5.3	0.2		10.5	19.1	24.3	0.3	2880
MAY		4.9	6.9		7.0	7.0	6.1	9.6		13.1	24.2	21.3	6.8	2976
JUN		8.4	9.6		7.1	7.1	7.6	8.5		13.0	20.1	18.0	0.2	2880
JUL		11.5	11.1		8.4	8.9	6.9	8.4		12.0	21.4	11.4	5.6	2976
AUG		9.5	8.6		6.7	8.0	6.6	8.4		12.0	20.7	19.6	6.2	2976
SEP		14.9	8.7		7.3	7.1	5.7	7.0		10.0	18.2	21.1	5.8	2880
OCT		10.1	4.4		4.9	4.2	4.9	4.6		2.8	21.7	36.1	7.2	2976
NOV		9.3	4.4		4.0	4.1	3.0	3.0		6.7	18.9	40.6	7.6	2880
DEC		7.6	2.4		3.4	2.7	2.2	3.1		5.2	20.5	53.0	8.1	2976
TOTALS		9.8	6.3		5.6	5.7	4.9	6.4		9.6	20.4	31.4	0.8	3534

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2
0
DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SKY COVER

35032
STATION

RHEIN-MAIN

STATION NAME
FRANKFURT

67-70
PERIOD

JAN
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER											MEAN TENTHS OF SKY COVER	TOTAL NO OF OBS
		0	1	2	3	4	5	6	7	8	9	10		
JAN	00-02	9.9	1.6		2.4	4.8	2.2	2.7		2.2	12.6	61.6	8.0	372
	03-05	9.4	1.1		2.4	.8	.8	2.7		3.8	15.9	63.2	8.4	372
	06-08	3.8	2.2		2.7	2.2	2.7	2.4		5.6	22.0	56.5	8.5	372
	09-11	3.0	2.2		.6	3.0	2.2	.8		8.6	31.5	48.1	8.7	372
	12-14	1.6	2.2		2.4	2.2	3.8	4.3		8.6	28.0	47.0	8.5	372
	15-17	2.2	2.4		1.9	4.0	4.0	5.6		7.3	28.2	44.4	8.3	372
	18-20	6.7	1.9		4.8	3.2	2.7	4.6		5.4	20.7	50.0	8.0	372
	21-23	10.2	2.4		4.0	1.6	1.9	3.0		6.2	15.1	55.6	7.9	372
TOTALS		5.9	2.0		2.7	2.7	2.5	3.3		6.0	21.8	53.3	8.3	2976

USAFETAC

FORM
JUL 64 0-9-5 (OL A)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

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STATION

STATION NAME

PERIOD

MONTH

4

6

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/R.

SKY COVER

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-70
PERIOD

MAR
MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER											MEAN TENTHS OF SKY COVER	TOTAL NO OF OBS
		0	1	2	3	4	5	6	7	8	9	10		
MAR	00-02	17.2	5.4		4.8	5.9	3.2	7.5		5.1	15.9	34.9	6.4	372
	03-05	17.7	3.8		3.0	5.1	1.9	4.0		7.2	16.1	40.9	6.8	372
	06-08	5.4	6.5		4.8	5.9	4.6	4.8		7.5	22.8	37.6	7.4	372
	09-11	7.5	5.6		3.5	4.0	4.6	8.3		11.3	20.2	34.9	7.3	372
	12-14	5.6	4.8		3.2	5.4	6.7	8.6		12.6	26.1	26.9	7.3	372
	15-17	5.6	4.6		4.3	10.2	5.9	7.3		13.2	22.8	26.1	7.0	372
	18-20	9.9	5.6		7.5	8.6	7.0	7.0		9.4	19.4	25.5	6.4	372
	21-23	18.8	5.6		7.0	7.8	2.2	5.4		4.8	18.0	30.4	6.1	372
TOTALS		11.0	5.2		4.8	6.6	4.5	6.6		8.9	20.2	32.2	6.8	2976

SKY COVER

57-72

APP
MONTH

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER											MEAN TENTHS OF SKY COVER	TOTAL NO. OF OBS
		0	1	2	3	4	5	6	7	8	9	10		
APR	00-02	20.8	9.7		6.7	8.1	3.6	5.6		6.4	15.6	23.6	5.4	360
	03-05	16.7	8.3		5.6	5.0	2.5	5.6		7.2	19.7	29.2	6.2	360
	06-08	12.5	9.2		5.8	4.7	3.6	5.3		7.5	20.6	30.8	6.5	360
	09-11	7.8	8.3		6.4	7.5	5.0	10.3		11.4	17.5	25.3	6.5	360
	12-14	5.8	8.3		4.4	5.0	8.9	11.1		18.1	17.5	20.8	6.6	360
	15-17	6.1	5.8		3.3	5.8	5.0	14.7		14.2	18.6	21.4	6.6	360
	18-20	6.3	5.8		5.6	8.1	7.8	8.9		10.0	23.9	21.7	6.6	360
	21-23	20.0	6.1		8.1	6.7	5.6	4.4		8.9	19.4	20.8	5.7	360
TOTALS		12.3	7.7		6.4	6.4	5.3	8.2		10.5	19.1	24.3	6.3	2880

SKY COVER

44Y

MONTH

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER											MEAN TENTHS OF SKY COVER	TOTAL NO. OF OBS.
		0	1	2	3	4	5	6	7	8	9	10		
MAY	00-02	15.1	8.3		9.7	6.2	4.8	5.1		9.1	16.9	24.7	5.9	372
	03-05	6.2	8.3		6.7	8.1	5.9	6.7		7.8	21.2	29.0	6.7	372
	06-08	4.6	8.3		5.4	6.2	5.1	8.1		15.6	22.6	24.2	6.9	372
	09-11	.5	7.8		4.8	6.7	7.8	12.4		16.9	25.3	17.7	7.0	372
	12-14		2.7		5.1	9.4	6.5	12.6		19.6	27.4	16.7	7.3	372
	15-17		5.1		6.5	5.4	6.7	13.2		13.4	31.7	18.0	7.3	372
	18-20	1.6	6.5		5.6	7.0	4.6	11.3		14.8	30.4	18.3	7.2	372
	21-23	11.0	8.1		11.8	7.0	7.3	7.5		7.3	18.3	21.8	5.9	372
TOTALS		4.9	6.9		7.0	7.0	6.1	9.6		13.1	24.2	21.3	6.8	2976

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SKY COVER

35032

RHEIN-MAIN APT GERMANY/FRANKFURT

67-70

JUN

STATION

STATION NAME

PERIOD

MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER											MEAN TENTHS OF SKY COVER	TOTAL NO. OF OBS
		0	1	2	3	4	5	6	7	8	9	10		
JUN	00-02	23.6	8.9		8.1	6.4	6.4	4.2		9.2	14.7	18.6	5.1	360
	03-05	10.0	13.6		7.5	4.2	5.8	7.5		13.1	20.0	17.8	5.9	360
	06-08	11.4	11.9		8.3	5.6	7.5	6.7		11.7	19.2	17.8	5.8	360
	09-11	3.6	10.6		6.9	7.8	8.1	8.6		13.3	22.5	18.6	6.5	360
	12-14	1.4	4.7		5.8	8.9	11.4	14.7		13.9	20.0	19.2	6.9	360
	15-17	1.7	5.8		8.1	8.1	8.3	9.7		16.1	25.0	17.2	6.9	360
	18-20	3.3	10.8		3.6	7.8	7.2	4.7		13.6	25.3	18.6	6.7	360
	21-23	11.7	10.6		8.1	7.8	6.1	6.9		13.3	14.4	21.1	5.9	360
TOTALS		8.4	9.6		7.1	7.1	7.6	8.5		13.0	20.1	18.6	6.2	2880

USAFETAC

FORM
JUL 64

0-9-5 (OL A)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

SKY COVER

July

IONIN

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER											MEAN TENTHS OF SKY COVER	TOTAL NO. OF OBS.
		0	1	2	3	4	5	6	7	8	9	10		
JUL	00-02	30.6	8.1		9.7	9.7	5.4	6.5		9.1	9.9	11.0	4.1	372
	03-05	12.1	12.9		8.1	7.3	4.6	7.8		10.5	23.7	13.2	5.0	372
	06-08	11.6	12.1		7.5	6.2	4.8	7.0		9.1	25.0	16.7	5.9	372
	09-11	8.6	12.6		5.4	9.1	6.5	6.7		12.7	23.9	14.2	6.0	372
	12-14	3.2	9.9		5.6	9.4	10.8	11.3		15.1	24.2	9.4	6.3	372
	15-17	4.3	8.3		11.3	8.9	10.2	10.2		14.5	24.5	7.8	5.0	372
	18-20	4.6	13.4		7.5	9.7	7.3	12.9		13.2	23.7	7.8	5.8	372
	21-23	16.7	11.8		12.1	10.5	5.9	5.1		10.8	15.9	11.3	4.9	372
TOTALS		11.5	11.1		8.4	8.9	6.9	8.4		12.0	21.4	11.4	5.6	2976

SKY COVER

A.C.
MONTH

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER											MEAN TENTHS OF SKY COVER	TOTAL NO. OF OBS
		0	1	2	3	4	5	6	7	8	9	10		
AUG	00-02	24.7	7.5		6.5	5.0	8.9	4.0		7.0	11.6	23.4	5.2	372
	03-05	14.0	10.2		10.2	7.3	4.0	5.4		8.0	17.2	23.1	5.8	372
	06-08	8.9	11.8		5.1	4.8	4.6	5.1		11.5	27.2	26.7	6.5	372
	09-11	5.4	7.3		7.3	7.5	7.8	11.3		13.2	22.8	17.5	6.5	372
	12-14	.3	8.6		6.2	5.4	9.9	14.0		13.4	27.4	10.8	6.6	372
	15-17	.5	12.4		4.8	9.9	5.1	11.0		17.7	21.2	17.2	6.6	372
	18-20	4.8	5.1		6.2	8.6	7.0	9.7		15.3	22.6	20.7	6.8	372
	21-23	17.2	5.6		7.0	10.8	5.4	5.9		8.6	15.9	23.7	5.8	372
TOTALS		9.5	8.6		6.7	8.0	6.6	8.4		12.0	20.7	19.6	6.2	2976

SKY COVER

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-77

SEP

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER											MEAN TENTHS OF SKY COVER	TOTAL NO OF OBS
		0	1	2	3	4	5	6	7	8	9	10		
SEP	00-02	30.8	7.8		8.3	4.2	3.3	6.1		6.1	12.5	20.8	4.7	360
	03-05	24.4	6.4		5.8	4.7	6.9	9.4		6.9	13.9	21.4	5.3	360
	06-08	8.9	10.0		7.2	7.8	4.7	6.9		8.6	18.1	27.8	6.4	360
	09-11	9.4	10.3		4.7	6.1	3.6	8.9		12.6	20.3	23.9	6.4	360
	12-14	5.3	8.1		5.6	8.1	8.6	6.7		15.3	25.6	16.9	6.6	360
	15-17	3.1	11.7		7.5	11.4	5.3	7.5		11.4	26.1	16.1	6.4	360
	18-20	11.4	7.8		10.8	7.2	7.5	7.2		10.3	18.1	19.7	5.9	360
	21-23	26.1	7.8		8.1	7.5	5.8	3.6		8.6	10.6	21.9	5.0	360
TOTALS		14.9	8.7		7.3	1	5.7	7.0		10.0	18.2	21.1	5.8	2880

SKY COVER

POST

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF TENTHS C-F TOTAL SKY COVER											MEAN TENTHS OF SKY COVER	TOTAL NO OF OBS
		0	1	2	3	4	5	6	7	8	9	10		
NOV	00-02	15.9	4.6		5.9	2.4	4.0	3.5		7.3	17.2	39.2	6.8	372
	03-05	13.7	4.6		4.0	2.4	3.2	3.8		6.5	17.5	44.4	7.2	372
	06-08	5.1	4.8		4.3	2.4	3.2	4.3		8.9	25.5	41.4	7.6	372
	09-11	6.7	2.7		3.0	5.1	4.6	4.6		9.4	26.6	37.4	7.7	372
	12-14	6.2	4.0		1.9	4.3	9.9	5.9		13.2	20.4	34.1	7.4	372
	15-17	6.7	4.8		4.8	6.2	5.1	5.6		9.7	28.2	28.8	7.2	372
	18-20	12.1	4.8		8.1	5.9	6.7	5.9		8.9	17.2	30.4	6.5	372
	21-23	14.2	4.8		7.3	5.1	2.7	5.1		6.7	20.7	33.3	6.6	372
TOTALS		10.1	4.4		4.9	4.2	4.9	4.8		8.8	21.7	36.1	7.2	2976

SKY COVER

47-70

 $N_{L,V}$

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER										MEAN TENTHS OF SKY COVER	TOTAL NO. OF OBS.	
		0	1	2	3	4	5	6	7	8	9			10
NOV	00-02	13.1	4.4		5.8	3.1	3.6	3.1		3.3	15.9	46.7	7.2	360
	03-05	15.3	2.2		4.4	2.8	1.9	2.2		3.6	17.2	50.3	7.4	360
	06-08	4.4	5.6		3.1	5.0	1.9	2.8		5.8	20.3	51.1	8.0	360
	09-11	4.4	5.0		1.9	1.9	1.7	2.2		8.3	21.1	53.3	8.3	360
	12-14	3.3	3.1		1.7	5.6	4.4	2.8		7.2	26.7	45.3	8.2	360
	15-17	3.1	4.7		6.4	4.4	3.9	3.6		11.4	20.8	41.7	7.8	360
	18-20	14.4	4.7		4.2	5.3	3.9	4.4		6.7	16.9	39.4	6.8	360
	21-23	16.1	5.6		4.4	5.0	2.5	3.1		7.5	11.1	44.7	6.6	360
TOTALS		9.3	4.4		4.0	4.1	3.0	3.0		6.7	18.9	46.6	7.6	2880

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

SKY COVER

35032 RHEIN-MAIN Apt GERMANY/FRANKFURT

67-70

JLC

STATION

STATION NAME

PERIOD

MONTH

PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T.)	PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER											MEAN TENTHS OF SKY COVER	TOTAL NO. OF OBS
		0	1	2	3	4	5	6	7	8	9	10		
DEC	00-02	14.2	1.6		3.5	2.7	1.1	3.5		4.0	13.4	55.9	7.0	372
	03-05	11.3	1.1		2.4	3.2	1.3	3.5		4.3	15.9	57.0	8.0	372
	06-08	4.3	4.0		3.0	1.6	2.7	2.4		4.6	19.1	58.1	8.4	372
	09-11	4.0	4.8		3.8	1.6	1.9	3.8		5.9	25.0	49.2	8.2	372
	12-14	2.4	3.0		2.7	2.7	2.4	3.5		5.4	30.9	47.0	8.5	372
	15-17	3.0	.3		4.0	5.6	1.9	3.8		6.7	27.7	46.5	8.3	372
	18-20	9.9	1.6		4.6	2.2	4.0	3.0		5.6	15.6	53.5	7.8	372
	21-23	11.0	2.4		3.5	2.2	1.9	1.3		4.6	16.7	56.5	7.9	372
TOTALS		7.6	2.4		3.4	2.7	2.2	3.1		5.2	20.5	53.0	8.1	2976

USAFETAC

FORM
JUL 64

0-9-5 (C) A

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

U S AIR FORCE
ENVIRONMENTAL TECHNICAL
APPLICATIONS CENTER

PART E

PSYCHROMETRIC SUMMARIES

In this section are presented various summaries of dry- and wet-bulb temperatures, dew points, and relative humidity. The order and manner of presentations follows:

1. Cumulative percentage frequency of occurrence - derived from daily observations and presented by month and annual for all years combined. These tabulations provide the cumulative percentage frequency to tenths of temperature by 5-degree Fahrenheit increments, plus mean temperature, standard deviations, and total number of observations in three separate tables as follows:
 - a. Daily maximum temperatures
 - b. Daily minimum temperatures
 - c. Daily mean temperatures

NOTE: Beginning in January 1964, daily maximum and minimum temperatures are routinely selected from hourly observations recorded on surface observing forms or from automated data collections for all Air Force operated stations. For those stations observing less than 24 hours per day, and where maximum and minimum temperatures are required but not recorded, these are also selected from hourly data from as early as January 1949 and later. Please refer to notations on summary pages and Station History for further information on reporting practices of individual stations.

2. Extreme values - derived from daily observations with the extreme value selected for each year and month of record available. An annual (ALL MONTHS) value is selected when all months for a year have valid extremes. Means and standard deviations are computed for months and annual when four or more values are present for any column. Two tables of daily extremes are prepared:
 - a. Extreme maximum temperature
 - b. Extreme minimum temperature

NOTE: The following symbols are used in the extreme data blocks:

- (1) * indicates the extreme was selected from a month with one or more days missing.
- (2) # indicates the extreme was selected from a month in which hourly temperatures were available for less than 24 hours for at least one day in the month.

Continued on Reverse

3. Bivariate percentage frequency distribution and computations of dry-bulb versus wet-bulb temperature.
This tabulation is derived from hourly observations and is presented by month and annual, all hours and years combined. The following information is provided:

- a. The main body of the summary consists of a bivariate percentage frequency distribution of wet-bulb depression in 17 classes spread horizontally; by 2-degree intervals of dry-bulb temperature spread vertically. Also provided for each of the dry-bulb intervals is the percentage of observations with dry-bulb and wet-bulb temperature combined; and again for dry-bulb, wet-bulb, and dew-point temperatures separately. Total observations for these four items is also provided in two lines at end of each tabulation table, which may be continued on several pages.

NOTE: A percentage frequency in this table of ".0" represents one or more occurrences amounting to less than .05 percent.

- b. Statistical data for the individual elements of relative humidity, dry-bulb, wet-bulb, and dew-point temperatures are shown in the section at the bottom left of the forms. These consist of the sum of squares ($\sum X^2$), sums of values ($\sum X$), means (\bar{X}), and standard deviations (σ_x). The number of observations used in the computation for each element is also shown.
- c. At the lower right of the form are given the mean number of hours of occurrence for six ranges of dry-bulb, wet-bulb, and dew-point temperatures, and total number of hours possible in the period represented. Mean number of hours is shown to tenths and indicates mean number of hours per year in the annual summary, or mean number of hours per month in the tabulation by month.

NOTE: Wet-bulb temperature usually was not reported prior to 1946. Relative humidity usually was not reported prior to 1949, nor subsequent to June 1958; and was computed by machine methods for observations recorded during these periods. All values of dew-point temperature and relative humidity are with respect to water, unless otherwise indicated.

4. Means and standard deviations - These tabulations are derived from hourly observations and present the mean, standard deviation, and total number of observations for the eight standard 3-hour groups, by month and annual and again at the bottom for all hours combined. Records for all years combined are presented in the following three tables; DRY-BULB TEMPERATURE, WET-BULB TEMPERATURE, and DEW-POINT TEMPERATURE.
5. Cumulative percentage frequency of occurrence of relative humidity - This summary is derived from hourly observations and presents the cumulative percentage frequency of occurrence of relative humidity by increments of 10% classes, plus the mean relative humidity and total number of observations in two tables.
 - a. Table 1 is prepared by month and annual, all years combined, with month being the vertical argument.
 - b. Table 2 is prepared by month by standard 3-hour groups, with the hour groups being the vertical argument and a separate page for each month. All years are also combined for this summary.

46-67

DAILY TEMPERATURES

STATION

STATION NAME

YEARS

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM DAILY OBSERVATIONS)

MAXIMUM

TEMP (°F)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
100							.2						.0
95						.5	2.9	.6					.3
90						3.4	6.7	4.3	1.5				1.3
85				.2	1.2	9.9	17.4	11.7	4.0				3.7
80				1.3	8.5	21.4	33.0	23.9	9.1	.1			8.1
75				5.9	20.9	41.4	52.6	44.5	22.8	1.8			15.7
70			.9	14.0	36.7	62.8	75.3	71.8	41.7	6.9			25.8
65			5.2	26.9	56.7	84.0	92.9	92.8	69.7	19.7			37.2
60	.2	1.4	16.0	46.4	79.1	95.0	99.2	99.4	89.5	40.3	1.4	.3	47.3
55	.8	5.4	30.6	66.5	94.4	99.5	100.0	100.0	98.3	67.2	8.1	1.3	56.0
50	5.4	15.7	54.2	86.6	99.1	100.0			99.8	84.1	29.2	6.9	65.1
45	17.5	32.3	70.9	96.7	99.3				100.0	95.9	55.6	22.2	74.3
40	38.1	52.1	85.2	99.5	100.0					99.3	78.2	46.5	83.3
35	63.9	73.6	96.8	100.0						100.0	94.8	72.4	91.8
30	81.9	89.3	99.7								99.7	88.1	96.6
25	92.6	95.4	100.0								100.0	95.3	98.6
20	98.5	98.5										99.0	99.7
15	99.8	99.5										99.9	99.9
10	100.0	99.7										100.0	100.0
5		100.0											100.0
MEAN	36.9	40.1	49.9	59.1	66.8	72.8	76.0	74.4	68.9	57.7	45.4	38.5	57.2
S. D.	7.932	9.111	9.015	9.065	8.389	8.610	8.538	7.543	7.843	7.843	6.723	7.707	16.257
TOTAL OBS.	646	591	643	629	645	626	645	639	657	680	657	680	7754

USAF ETAC FORM 0-21-5 (OL 1) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH

USAF ETAC

AIR WEATHER SERVICE/MAC

35032 REIN-HAIN APT GERMANY/FRANKFURT

4-67

STATION

STATION NAME

YEARS

DAILY TEMPERATURES

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM DAILY OBSERVATIONS)

MINIMUM

TEMP (°F)	JAN	FEB	MAR.	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
70						.3	1.1						.1
65					.2	1.1	9.2	1.7	.2				.7
60				.2	1.8	11.9	24.1	19.2	5.5	.1			5.2
55				.5	12.6	38.6	30.7	51.3	25.5	4.0		.1	16.1
50	.3	.3	.9	7.1	34.2	69.0	47.7	82.2	55.1	15.7	2.0	.6	29.6
45	1.2	2.5	7.2	25.1	60.6	89.2	96.2	94.5	79.2	38.0	9.4	3.4	42.2
40	7.4	11.6	22.6	51.6	81.2	97.8	99.4	99.7	92.6	62.6	32.5	13.1	56.1
35	24.0	26.1	45.2	79.2	93.7	99.5	100.0	100.0	98.9	80.6	58.3	32.3	69.9
30	34.6	36.8	52.8	85.6	97.1	99.8			99.5	86.2	67.4	42.6	75.3
25	50.5	50.3	68.4	92.9	99.4	100.0			100.0	94.4	81.9	62.4	83.5
20	69.7	70.8	84.8	98.6	100.0					99.6	94.1	79.0	91.5
15	82.2	83.6	95.4	100.0						100.0	98.9	88.3	95.8
10	95.6	90.6	99.1								99.7	93.5	97.7
5	95.4	94.9	99.7								100.0	97.6	99.0
0	98.3	97.1	100.0									99.7	99.6
-5	99.8	97.2										100.0	99.9
-10	100.0	100.0											100.0
MEAN	27.9	28.4	33.0	39.8	46.2	52.4	55.6	54.3	49.9	41.7	35.6	30.4	41.3
S D	9.307	9.833	8.617	6.781	7.092	6.140	5.741	5.583	6.420	7.421	6.948	8.742	12.295
TOTAL OBS.	651	593	651	630	650	629	651	651	659	682	659	681	7787

USAF ETAC 0-21-5 (OL 1) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING FRP-61

USAF - PAC

AIP WEATHER SERVICE/PAC

35022 3-11-MAIA APT GERMANY/FRANKFURT 57-67

STATION

STATION NAME

TARS

DAILY TEMPERATURES

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM DAILY OBSERVATIONS)

MEAN

TEMP (°F)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
85							.3						.0
80						.8	2.9	.8					.4
75					.2	3.8	10.4	5.2	.9				1.7
70				.2	2.5	13.1	27.3	18.6	4.6				5.5
65				1.6	12.9	36.3	52.4	46.5	20.0	.6			14.1
60			.2	7.8	32.0	69.3	85.9	81.4	48.6	6.3			27.5
55	.2	.5	2.9	23.4	60.6	91.9	98.3	98.3	79.3	25.1	.9	.1	40.1
50	.6	2.5	13.9	50.1	85.9	98.6	100.0	100.0	96.9	52.8	7.3	1.2	50.8
45	5.6	10.5	39.6	76.2	96.9	99.8			99.7	78.7	30.5	8.7	62.3
40	19.2	28.9	62.7	93.6	99.8	100.0			100.0	93.8	58.4	26.4	73.7
35	43.8	53.8	79.2	99.5	100.0					99.3	82.8	54.6	84.5
30	67.8	73.1	93.7	100.0						100.0	95.7	76.9	92.3
25	83.6	85.6	99.1								99.3	89.2	96.5
20	91.6	94.2	100.0								100.0	95.1	98.4
15	96.7	97.0										98.5	99.4
10	99.7	99.3										99.7	99.9
5	100.0	99.8										100.0	100.0
0		100.0											100.0
MEAN	32.5	34.3	41.6	49.5	56.6	62.7	69.3	64.5	59.5	49.8	40.8	34.6	49.4
S.D.	1.267	8.950	7.444	6.698	6.539	6.205	6.280	5.548	5.920	6.530	6.306	7.958	13.743
TOTAL OBS	546	591	649	629	644	624	649	649	656	680	686	679	7750

USAF ETAC FORM 0-21-5 (OL 1) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

USAF ETAC FORM 0-88-5 (OLA) # (AT LEAST ONE DAY < 24 OBS)

EXTREME VALUES

MINIMUM TEMPERATURE

FROM DAILY OBSERVATIONS

STATION

STATION NAME

YEARS

[illegible]

NOTES * (BASED ON < FULL MONTHS)

USAF ETAC FORM 0-88-3 (OIA) # (AT LEAST ONE DAY < 24 DBS)

PSYCHROMETRIC SUMMARY

ALL
MONTH

ALL

[illegible]

PSYCHROMETRIC SUMMARY

ALL
MONTH

ALL

[illegible]

PSYCHROMETRIC SUMMARY

JAN
MONTH

STATION

STATION NAME

11 ABS

MONTH

PAGE 1

ALL

HOURS (L, S, T)

[illegible]

PSYCHROMETRIC SUMMARY

JAN
MONTH

PAGE 2

ALL

[illegible]

USAFETAC
FORM
NW 44
0-26-5 (OL A)
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

PSYCHROMETRIC SUMMARY

FEB

STATION

STATION NAME

YFARS

MONTE

PAGE 1

ALL

HOURS (L, S, T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																												TOTAL		TOTAL				
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	≥ 31	D.B. W.B.	Dry Bulb	Wet Bulb
60/ 59													.0																			1	1		
58/ 57								.1		.1																						10	10		
56/ 55								.0		.0																						3	3		
54/ 53						.1		.0																								4	4		
52/ 51			.0	.2	.3	.1		.0	.0																							30	30		
50/ 49			.1	.8	.6	.2	.1	.0	.0				.0																			91	91	14	
48/ 47			.0	.8	.4	.3	.0	.1																								112	112	43	5
46/ 45	.1	1.4	1.3	.2	.4	.1																										212	212	89	40
44/ 43	.1	2.3	1.8	1.1	.4																											268	268	161	52
42/ 41	.6	5.4	4.9	1.5	.3	.0																										592	592	262	145
40/ 39	1.0	5.7	5.6	.4	.1	.0																										528	528	473	277
38/ 37	2.1	6.8	3.2	.9	.1	.0																										613	614	708	390
36/ 35	1.1	7.0	2.9	.2	.1																											527	527	629	427
34/ 33	2.2	4.8	.6	.1																												408	408	712	589
32/ 31	2.1	6.7	.1	.1																												449	451	487	684
30/ 29	1.3	4.0		.0																												274	274	403	527
28/ 27	2.8	2.7	.3																													252	252	306	506
26/ 25	1.4	1.2	.1																													129	129	164	358
24/ 23	.5	1.0	.0																													88	88	97	305
22/ 21	.3	.2																														23	23	57	120
20/ 19	.1	.2																														13	13	16	81
18/																																			

PSYCHROMETRIC SUMMARY

MAR

STATION

STATION NAME

YEARS

MONTH

PAGE 1

ALL

400RS ' S. T. 1

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																												TOTAL D.B. - W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	+ 31	Dry Bulb	Wet Bulb	Dew Point												
76/ 75										.0									1	1												
74/ 73										.0									1	1												
72/ 71										.0									1	1												
70/ 69										.0									2	2												
68/ 67						.0	.0	.1	.1	.1									16	16												
66/ 65					.1	.0	.1	.1	.1	.1									27	27												
64/ 63				.0	.3	.2	.3	.3	.1										44	44												
62/ 61			.1	.2	.1	.2	.0												32	32												
60/ 59		.0	.0	.5	.2	.4	.2	.1											70	70												
58/ 57	.0	.1	.2	.4	.3	.2													61	61	7											
56/ 55	.1	.1	.4	.6	.4	.1													83	83	25											
54/ 53	.2	.4	.5	.7	.3		.0												106	106	63	3										
52/ 51	.3	.8	.9	.5	.3	.1													152	152	72	8										
50/ 49	.1	.6	2.3	2.0	1.2	.6	.0	.0											341	341	156	50										
48/ 47	.1	1.2	2.4	1.3	1.1	.4	.1	.1											333	333	209	70										
46/ 45	.3	3.0	2.6	1.6	1.1	.3	.0	.0											452	452	333	133										
44/ 43	.3	3.6	2.2	1.4	.8	.2	.1												440	440	444	204										
42/ 41	.5	5.7	3.8	1.4	.6	.1	.0												618	618	510	388										
40/ 39	.7	3.4	2.7	1.1	.3	.1	.0												422	422	553	462										
38/ 37	1.0	3.3	2.4	.7	.2	.1													389	389	571	492										
36/ 35	.7	3.9	2.0	.5	.1														373	373	456	412										
34/ 33	1.1	2.5	1.5	.4	.0														281	281	534	516										
32/ 31	.8	3.4	1.4	.5	.0														315	315	330	528										
30/ 29	.6	1.9	.8	.0															172	172	291	376										
28/ 27	1.0	1.4	.3																134	134	211	420										
26/ 25	.4	.9	.2																77	77	124	289										
24/ 23	.1	.9	.3																63	63	61	205										
22/ 21	.2	.5	.1																35	35	59	124										
20/ 19	.0	.3	.0																15	15	38	115										
18/ 17	.1	.4																	23	23	23	90										

PSYCHROMETRIC SUMMARY

MAR
MAR 1964

PAGE 2

ALL

HOURS (L.S. ?)

[illegible]

PSYCHROMETRIC SUMMARY

APR
MONTH

PAGE 1 ALL

AMOUNT DUE U. S. :

[illegible]

PSYCHROMETRIC SUMMARY

APR
MONTH

STATION

STATION NAME

YFARS

MONTH

PAGE 2

ALL

HOURS (L, S, T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15	16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B.-W.B.	Dry Bulb	Wet Bulb	Dew Point		
16/ 15																						7		
14/ 13																						3		
TOTAL	5.4	25.3	23.2	14.5	12.1	7.7	4.7	3.1	2.1	1.0	.4	.2							4891	4893	4891	4891		
								</																

PSYCHROMETRIC SUMMARY

JUN
MONTH

STATION

STATION NAME

YEARS

MONTH

PAGE 2

ALL

HOURS (L. S. T.)

[illegible]

USAFETAC FORM 0-26.5 (OL A) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

PSYCHROMETRIC SUMMARY

YEARS

JUL
MONTH

PAGE 2

ALL
HOURS (1 5 7)

[illegible]

PSYCHROMETRIC SUMMARY

SEP
MONA

STATION

STATION NAME

YFARS

MONIA

PAGE 1

ALL

HOURS (L - T)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																												TOTAL	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	+31	D.B.-W.B.	Dry Bulb	Wet Bulb	Dew Point											
90/ 89													.0					1	1													
88/ 87											.0	.0						4	4													
86/ 85									.0	.2	.1	.1						17	17													
84/ 83									.1	.1	.0	.0						11	11													
82/ 81							.0	.1	.0									8	8													
80/ 79						.1	.1	.2	.0	.0								19	19													
78/ 77					.1	.3	.6	.1	.1	.0								65	65													
76/ 75					.1	.4	.3	.2	.1	.0								53	53													
74/ 73				.1	.2	.4	.6	.2	.0	.0								75	75													
72/ 71			.1	.2	.7	.4	.4	.2	.1	.0								101	101													
70/ 69			.2	.5	1.3	.6	.3	.3	.1									162	162	10												
68/ 67		.0	.6	1.3	1.2	1.0	.6	.4	.0									257	257	68												
66/ 65	.1	.4	1.1	1.1	.9	.6	.6	.2	.0									242	242	119	13											
64/ 63	.2	1.4	2.1	1.3	1.0	1.2	.4	.1										375	375	212	70											
62/ 61	.5	2.5	1.6	1.5	1.0	.5	.2											379	379	371	141											
60/ 59	.9	3.8	2.6	2.5	1.2	.8	.0	.0	.0									579	579	430	383											
58/ 57	.8	3.0	2.4	1.5	.9	.1	.1	.0										434	434	481	397											
56/ 55	1.2	3.4	2.3	1.5	.4	.0												431	431	581	432											
54/ 53	1.5	3.4	2.1	.8	.1	.0												384	384	654	445											
52/ 51	1.7	3.4	2.0	.2	.0													357	357	525	540											
50/ 49	1.1	3.9	1.5	.1	.1													324	324	512	655											
48/ 47	.7	2.5	.6	.0	.0													187	187	340	459											
46/ 45	1.1	2.0	.1	.0														156	156	225	488											
44/ 43	.8	1.2	.0															100	100	155	329											
42/ 41	1.2	1.0	.0															109	109	118	342											
40/ 39	.3	.2	.0															25	25	44	109											
38/ 37	.3	.1																20	20	26	37											
36/ 35	.1	.1																9	9	12	18											
34/ 33	.0																															
32/ 31																		2	2	3	21											
30/ 29																					4											
28/ 27																					2											
26/ 25																					1											
TOTAL	12.6	32.1	19.2	12.7	9.2	6.4	4.1	2.1	.7	.4	.1	.2	.0					4886	4886	4886	4886											
Element (X)	Σx ²		Σx		Σx		Σx		Σx		Σx		Σx		Σx		Σx		Σx		Σx											
Rel. Hum.	31412897		383151		78.4		16.728		4886		± 0 F		± 32 F		± 67 F		± 73 F		± 80 F		± 93 F											
Dry Bulb	16809512		283532		58.0		8.540		4886						113.9		37.3		7.4		Total											
Wet Bulb	14400173		263485		52.9		6.262		4886						11.5						720											
Dew Point	12718741		247441		50.6		6.197		4786				1.0								720											

PSYCHROMETRIC SUMMARY

OCT
MONTH

ALL
HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																												TOTAL D.B. W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17	18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb	Wet Bulb	Dew Point											
78/ 77																				2	2											
76/ 75								.0												3	3											
74/ 73							.0	.0												4	4											
72/ 71					.1		.0													24	24											
70/ 69				.0	.2	.1	.0	.0	.0											52	52											
68/ 67				.2	.2	.5	.1	.1												52	52											
66/ 65			.1	.3	.4	.1	.1	.1												102	102	15										
64/ 63		.1	.6	.6	.4	.3	.1	.0												104	104	34										
62/ 61		.3	.6	.6	.4	.1	.1													212	212	84										
60/ 59		1.2	1.1	1.0	.5	.4	.0	.0												234	234	179										
58/ 57	.1	1.3	1.1	1.1	.6	.2	.2	.0												302	302	240										
56/ 55	1.0	1.9	1.2	.8	.6	.4	.0													609	609	445										
54/ 53	.7	1.9	1.7	.8	.3	.2														462	462	535										
52/ 51	1.0	3.0	2.5	.7	.3	.2														564	564	636										
50/ 49	1.6	5.1	4.0	.6	.5	.2	.0													444	444	610										
48/ 47	1.0	4.6	2.6	.5	.4		.0													457	457	471										
46/ 45	2.4	6.7	1.4	.6	.2															257	257	477										
44/ 43	2.0	5.5	.8	.5	.0															207	207	275										
42/ 41	2.2	5.6	1.2	.1	.0															104	104	136										
40/ 39	2.9	1.6	.5	.1																74	74	114										
38/ 37	2.3	1.5	.3	.0																78	78	76										
36/ 35	.8	1.2	.1																	18	18	31										
34/ 33	.6	.9	.0																	10	10	15										
32/ 31	.6	.9	.1																	5	5	6										
30/ 29	.0	.3																		1	1	2										
28/ 27	.1	.1																														
26/ 25	.1	.0																														
24/ 23	.0																															
22/ 21																																
20/ 19																																
18/ 17																																
TOTAL	19.3	43.7	19.7	8.4	5.2	2.6	.8	.3	.0											5049	5049	5049										
Element (X)	ΣX ²		ΣX		ΣX		ΣX		ΣX		ΣX		ΣX		ΣX		ΣX		ΣX		ΣX											
Rel. Hum.	36576391		423825		83.91		14.071		5049		Σ 0 F		Σ 22 F		Σ 47 F		Σ 73 F		Σ 80 F		Σ 93 F											
Dry Bulb	12060379		243537		48.2		7.908		5050		16.5		12.7		.9						Total											
Wet Bulb	10780733		230843		45.7		6.698		5049		19.2										744											
Dew Point	9656435		218069		43.2		6.365		5049		56.4										744											

PSYCHROMETRIC SUMMARY

NOV

STATION

STATION NAME

YEARS

MONTH

PAGE 1

ALL

HOURS (L, S, T, A)

[illegible]

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 67-76

DEC

PAGE 1

ALL

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL D.B.-W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	>31	Dry Bulb	Wet Bulb	Dew Point				
58/ 57			.1	.1															6	6				
56/ 55		.0	.4	.1															24	24				
54/ 53		.2	.3	.0															27	28	13			
52/ 51		.6	.5																57	57	35	1		
50/ 49	.2	1.5	.8	.1															134	134	81	73		
48/ 47	.1	1.5	1.0	.1	.0														141	141	114	91		
46/ 45	.5	2.8	.9	.2															225	225	131	114		
44/ 43	.6	3.4	.8	.3															255	255	266	117		
42/ 41	1.0	6.1	2.4	.2															494	494	272	257		
40/ 39	.6	5.0	1.9	.1															394	394	398	314		
38/ 37	1.4	6.7	1.2	.1															483	483	514	357		
36/ 35	1.5	8.1	1.1	.1															547	547	563	407		
34/ 33	3.0	5.6	1.1	.0	.0														493	493	681	599		
32/ 31	3.0	5.7	.8	.2															493	493	497	708		
30/ 29	1.8	3.4	.4	.0															287	287	370	425		
28/ 27	3.2	3.5	.3	.0															358	359	343	393		
26/ 25	1.4	1.3	.2																147	147	213	278		
24/ 23	1.5	2.2	.1																189	190	156	258		
22/ 21	.8	.8	.0																83	84	158	140		
20/ 19	.6	.7																	69	69	77	141		
18/ 17	.9	.5																	76	76	98	110		
16/ 15	.3	.2																	26	26	24	110		
14/ 13	.4	.4																	43	43	44	83		
12/ 11	.3	.1																	19	19	22	42		
10/ 9	.2																		12	12	12	48		
8/ 7	.2																		11	11	11	13		
6/ 5	.2																		9	9	9	15		
4/ 3	.0																		2	2	2	7		
2/ 1																						3		
TOTAL	23,760.5	14.2	1.6	.1															5104	5108	5104	5104		
Element (X)	Z _x	Z _y	X	Y	No. Obs.	Mean No. of Hours with Temperature																		
Rel. Hum.	38639828	441532	86.5	9.330	5104	≤ 0 F	≤ 32 F	≥ 47 F	≥ 73 F	≥ 80 F	≥ 93 F	Total												
Dry Bulb	6623328	178902	35.0	8.367	5108								266.1				744							
Wet Bulb	6089283	171617	33.6	7.904	5104								296.8				744							
Dew Point	5368618	159822	31.3	8.447	5104								404.4				744							

USAFETAC FORM 0-26-5 (OLA) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

PSYCHROMETRIC SUMMARY

PAGE 1 JAN MONTH 0000-0200

[illegible]

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 67-76

JAN

PAGE 1 0300-0500

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																								TOTAL	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17	18	19-20	21	22	23-24	25-26	27	28	29-30	31	D.B.-W.B.	Dry Bulb	Wet Bulb	Dew Point				
50/ 49	.3	2.0	1.2																		23	23	3	3				
48/ 47	.2	1.2	.6																		13	13	16	4				
46/ 45	.2	2.8	.9																		25	25	17	14				
44/ 43	.8	3.4	.8																		32	32	27	19				
42/ 41	1.4	6.3	.6																		54	54	42	36				
40/ 39	1.4	4.8	1.2	.3																	50	50	38	44				
38/ 37	1.4	2.9	.3																		30	30	46	51				
36/ 35	1.4	6.5	.9																		57	57	40	39				
34/ 33	3.2	5.1	.2																		55	55	80	54				
32/ 31	9.4	8.8	.2																		119	119	101	110				
30/ 29	3.2	3.7																			45	45	71	64				
28/ 27	3.9	1.5																			35	35	30	70				
26/ 25	1.4	.6																			13	13	16	25				
24/ 23	1.2	.5																			11	11	13	12				
22/ 21	.6	.6																			8	8	8	6				
20/ 19	.9	2.0																			19	19	15	12				
18/ 17	.8	1.2	.2																		14	14	18	10				
16/ 15	1.7	.6																			15	15	16	15				
14/ 13	1.9	.6																			16	16	15	24				
12/ 11	.5	.3																			5	5	7	14				
10/ 9	.3																				2	2	2	6				
8/ 7	.8																				5	5	5	5				
6/ 5																								8				
4/ 3																								1				
-4/ -5	.3																				1	1	1					
-8/ -9																								1				
TOTAL	36.9	55.6	7.1	.3																	647	647	647	647				

USAFETAC FORM 0-26-5 (OL A) REVISIONS OF THIS FORM ARE OBSOLETE

PSYCHROMETRIC SUMMARY

JAN

STATION

STATION NAME

YEARS

MONITOR

PAGE 1 0900-1100

HOURS (L.S.T.)

[illegible]

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 67-76

JAN

STATION

STATION NAME

YEARS

MONTH

PAGE 1 1500-1700

HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																TOTAL D.B. W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb	Wet Bulb	Dew Point
54/ 53		.2	.3	.2														4	4	
52/ 51		.8	.5	.3														10	10	5
50/ 49	.3	1.4	2.4	.2														27	27	9
48/ 47	.2	1.6	1.8	.5														25	25	20
46/ 45	.2	4.8	2.7	1.1	.2													56	56	24
44/ 43	.3	5.9	2.7	.8														61	61	48
42/ 41	.3	9.1	3.4	.5														83	83	58
40/ 39	1.4	4.6	2.4	.5	.2													57	57	91
38/ 37	1.4	4.8	1.3	.5														50	50	67
36/ 35		6.2	1.3	.2														48	48	52
34/ 33	1.4	6.7	1.6	.2														62	62	71
32/ 31	2.6	5.8	.2															53	53	68
30/ 29	.6	2.2	.3															20	20	34
28/ 27	.8	2.2	.5															22	22	17
26/ 25	.2	.6																5	5	12
24/ 23		1.3	.5															11	11	9
22/ 21		2.1																13	13	11
20/ 19	.3	1.1																9	9	17
18/ 17		.6																4	4	6
16/ 15	.3																	2	2	3
14/ 13	.2	.2																2	2	2
12/ 11	.2																	1	1	1
10/ 9		.2																1	1	1
6/ 5																				
TOTAL	10.7	62.5	21.7	4.8	.3													626	626	626
Element (X)	Σ x ²		Σ x		Σ		Σ		Σ		Σ		Σ		Σ		Σ		Σ	
Rel. Hum.	4386515		52001		83.1		10.343		626		± 0 F		± 32 F		± 67 °		± 73 F		± 80 F	
Dry Bulb	930476		23654		37.8		7.662		626		21.2								93	
Wet Bulb	838997		22461		35.9		7.276		626		26.9								93	
Dew Point	722181		20645		32.0		8.131		626		42.8								93	

USAFETAC FORM 0-26-5 (OL A) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 67-76

JAN
MONTH

PAGE 1 1800-2000
HOURS (L, S, T, I)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL D.B. W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	> 31	Dry Bulb	Wet Bulb	Dew point				
56/ 55			.2															1	1					
54/ 53		.6																4	4					
52/ 51		.2																1	1	5				
50/ 49		1.5	1.1															17	17	4	6			
48/ 47	.2	1.5	1.1															18	18	13	6			
46/ 45	.3	3.4	.3	.2														27	27	22	11			
44/ 43	.5	4.5	1.4															41	41	34	19			
42/ 41	1.1	10.8	3.7															101	101	44	49			
40/ 39	1.1	6.3	1.9															60	60	79	59			
38/ 37	2.8	4.0	.8	.3														51	51	86	68			
36/ 35	.5	7	.3															51	51	40	43			
34/ 33	1.9	5.0	1.2															56	56	71	60			
32/ 31	2.9	7.7	.5															72	72	73	76			
30/ 29	1.1	4.8	.2															39	39	56	57			
28/ 27	2.0	2.0																26	27	32	54			
26/ 25	.8	1.5	.2															16	16	12	35			
24/ 23	.8	.9																11	11	17	24			
22/ 21	.5	1.9	.2															16	16	10	9			
20/ 19	.8	1.7	.3															18	18	17	10			
18/ 17	.2	.2																2	2	12	13			
16/ 15	.3	.6																6	6	4	15			
14/ 13	.2	.6																5	5	6	11			
12/ 11	.2																	1	1	3	4			
10/ 9	.6																	4	4	4	7			
8/ 7	.2	.2																2	2	1	3			
6/ 5																				1	6			
2/ 1																					1			
TOTAL	18.6	67.8	13.2	.5														646	647		646			
Element (X)	Zx ²	Zx	X	No. Obs.	Mean No. of Hours with Temperature																			
Rel. Hum.	4880930	55876	86.5	8619	646	≤ 0 F	≤ 32 F	≥ 67 F	≥ 73 F	≥ 80 F	≥ 93 F	Total												
Dry Bulb	857978	22958	35.5	8191	647	31.5				93														
Wet Bulb	791876	22040	34.1	7867	646	35.7				93														
Dew Point	701225	20549	31.8	6388	646	46.8				93														

USAFETAC FORM 0-26-5 (OL A) JUL 64 REVISD PREVIOUS EDITIONS "Y" THIS FORM ARE OBSOLETE

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 YEARS

JAN MONTH

PAGE 1 2100-2300 HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL D.B.-W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31		Dry Bulb	Wet Bulb	Dew Point
54/ 53		.3																2	2		
52/ 51		.2					.2											2	2	3	
50/ 49	.5	1.4		.6	.2													17	17	4	
48/ 47	.2	1.9	2.0	.2														27	27	12	
46/ 45		3.7	.9															30	30	17	
44/ 43	.5	3.2	1.4															33	33	46	
42/ 41	1.2	7.7	.8															63	63	34	
40/ 39	1.2	2.6	2.0															57	57	71	
38/ 37	2.9	4.9	.3															53	53	62	
36/ 35	2.5	8.2	.8															74	74	67	
34/ 33	1.4	5.6	.3															47	47	74	
32/ 31	4.0	9.1																85	85	65	
30/ 29	2.0	4.6																43	43	67	
28/ 27	2.3	1.4																24	24	30	
26/ 25	.9	.8	.2															12	12	12	
24/ 23	1.1	1.4																16	16	13	
22/ 21	.9	.6																10	10	17	
20/ 19	.8	1.2																13	13	10	
18/ 17	.9	1.1																13	13	14	
16/ 15	.3	.8																7	7	8	
14/ 13	1.4	.5																12	12	14	
12/ 11	.2																	1	1	1	
10/ 9	.6																	4	4	4	
8/ 7	.3																	2	2	2	
6/ 5																					
2/ 1	.2																	1	1	1	
-2/ -3																					
TOTAL	26.2	64.0	9.3	.3			.2											.648	648	648	
Element (X)	Σ x ²		Σ x		Σ		Σ		Σ		Σ		Σ		Σ		Σ		Σ		
Rel. Hum.	5080048		57136		88.2		8.077		648		≤ 0 F		≤ 32 F		≥ 67 F		≥ 73 F		≥ 80 F		
Dry Bulb	831164		22530		34.8		8.598		648				34.9						93		
Wet Bulb	773536		21752		33.6		8.187		648				37.0						93		
Dew Point	694542		20439		31.6		8.667		648		.1		48.2						93		

USAFETAC FORM 44 0-26-5 (OL A) REVISION PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

PSYCHROMETRIC SUMMARY

YEARS

FEB
MONTH

PAGE 1 0000-0200
HOURS (L. S. T.)

[illegible]

PSYCHROMETRIC SUMMARY

FEB
MONTH

PAGE 1 0300-0500
HOURS (L. S. T.)

[illegible]

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 67-76
STATION STATION NAME

FEB
MON

PAGE 1 0600-0800
HOURS (L. S. T.)

[illegible]

PSYCHROMETRIC SUMMARY

PAGE 1

[illegible]

PSYCHROMETRIC SUMMARY

FEB

PAGE 1 1200-1400
HOURS (L. S. T.)

[illegible]

PSYCHROMETRIC SUMMARY

FEB
MONTH

PAGE 1 1500-1700
HOURS (L. S. T.)

[illegible]

PSYCHROMETRIC SUMMARY

FEB

1800-2000

[illegible]

PSYCHROMETRIC SUMMARY

FEB

STATION

STATION NAME

Y1 ARS

MONTH

PAGE 1

2100-2300

HOURS (L, S, T.)

[illegible]

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 67-76
STATION STATION NAME

MAR

PAGE 1 0000-0200
HOURS (L. S. T.)

[illegible]

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 67-76

MAR
MONTH

PAGE 1 0300-0500

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL D.B. W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	> 31	Dry Bulb		Wet bulb		Dew Point		
54/ 53		.2																1	1					
52/ 51		.3	.2															3	3	2				
50/ 49		.6	1.6															14	14	2		4		
48/ 47	.2	1.2	1.7	.3														22	22	11		3		
46/ 45	.5	4.1	1.6	.3														41	41	23		11		
44/ 43	.3	4.2	1.9															41	41	38		27		
42/ 41	.8	6.7	2.3		.2													64	64	47		29		
40/ 39	1.9	5.3	1.9	.2														59	59	72		64		
38/ 37	1.9	3.9	.9	.3														45	45	57		56		
36/ 35	2.0	7.2	.9															65	65	44		47		
34/ 33	2.5	5.8	.8															58	58	94		50		
32/ 31	2.2	8.0	1.2	.5														76	76	56		92		
30/ 29	3.3	4.2	.3															50	50	73		42		
28/ 27	2.8	3.4																40	40	39		73		
26/ 25	1.2	2.7	.2															26	26	33		44		
24/ 23	.3	1.4																11	11	17		23		
22/ 21	.3	.6																6	6	12		21		
20/ 19		.3																2	2	3		17		
18/ 17	.2	.9																7	7	6		5		
16/ 15	.6	.3																6	6	8		10		
14/ 13		.2																1	1	1		11		
12/ 11	.3	.2																3	3	3		5		
10/ 9																						3		
8/ 7																						4		
TOTAL	21.25	1.6	15.4	1.6	.2													641	641	641		641		
Element (X)	ΣX'		ΣX		Σ		Σ		Σ		Σ		Σ		Σ		Σ		Σ		Σ		Σ	
Rel. Hum.	4766453		54925		85.7		9.693		641		≤ 0 F		≤ 32 F		≥ 67 F		≥ 73 F		≥ 80 F		≥ 93 F		Total	
Dry Bulb	349469		22849		35.6		7.393		641				33.1										93	
Wet Bulb	781088		21912		34.2		7.076		641				36.4										93	
Dew Point	683006		20306		31.7		7.880		641				50.8										93	

USAFETAC FORM 0-26-5 (11 A) JUL 64

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[illegible]

PSYCHROMETRIC SUMMARY

MAR
MONTH[illegible]

PSYCHROMETRIC SUMMARY

MAR

STATION

STATION NAME

67-76

YEARS

PAGE 1

MONTH

1500-1700

HOURS (L. S. T.)

[illegible]

0-26-5 (O.L.A.)

FORM 4-1

USAFETAC

PSYCHROMETRIC SUMMARY

MAF
MONTH

1500-1700
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24	25 - 26	27 - 28	29 - 30	+ 31	D.B., W.B.	Dry Bulb	Wet Bulb	Dew Point			
6/ 5																					3			
TOTAL	1.3	12.6	21.0	20.3	22.2	12.8	3.8	3.6	1.6	.8								634	634		634			
																		634		634				

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MAR
MONTI

PAGE 1 2100-2300
HOURS (L. S. T.)

HOURS (L, S, T.)

USAFETAC FORM 0-26-5 (OLA) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE JUL 64

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35032
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67-76

APR

PAGE 1 0000-0200

0000-0200
HOURS (L S T)

USAFETAC FORM 0-26-5 (QLA) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

PSYCHROMETRIC SUMMARY

APR

PAGE 1 0300-0500
HOURS (L. S. T.)

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USAFETAC foam
0-26-5 (OLA)
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

PSYCHROMETRIC SUMMARY

APR

STATION

STATION NAME

YFARS

MONTH

PAGE 1

0600-0800

HOURS (L - S - T -)

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8137050 28V WFOV SAT. 10 W/CLD101 STROUJIM QISABE

0-26-5 (OL A)

FORM 4-72

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35032
STAT

67-76

APQ

MONITOR

PAGE 1

0900-1100

HOURS 11-5

0-2A.3 (01 A) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

USAFETAC

PSYCHROMETRIC SUMMARY

APR
MONT.

1200-1400

[illegible]

PSYCHROMETRIC SUMMARY

APR

STATION

STATION NAME

YEARS

MONTH

PAGE 2 1200-1400

1200-1400

HOURS (L, S, T.)

[illegible]

PSYCHROMETRIC SUMMARY

APR

STATION

STATION NAME

YEARS

MONTH

PAGE 1 1500-1700

1500-1700

[illegible]

2

YEARS

67-76

APR
MONTH

PAGE 2 1500-1700
HOURS (L. S. T.)

[illegible]

USAFETAC
FORM
III A4
0-26-5 (OL A)
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

USAFETAC

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PSYCHROMETRIC SUMMARY

35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 67-76 STATION NAME

MONITOR

PAGE 1 1800-2000
HOURS (L. S. T.)

FORM 0-26-5 (OL A)
JUL 64 REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

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DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 67-76
STATION STATION NAME YEARS

APR
MONTH

PAGE 1 2100-2300
H. URS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																TOTAL		TOTAL			
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15	16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B. W.B.	Dry Bulb	Wet Bulb	Dew Point
64/ 63				.2	.5	.5	.2												8	8		
62/ 61					.2	.2													2	2		
60/ 59		.2		.5	1.2	.7													16	16		
58/ 57			.3	.2	1.0	.3	.3												13	13	2	1
56/ 55			.7	.8	1.7	.7	.2												24	24	5	
54/ 53		.8	1.8	1.3	2.2	.5													40	40	9	1
52/ 51	.2	1.2	2.7	2.0	1.0	.5													45	45	28	6
50/ 49	.2	2.5	5.0	4.3	2.2	.5													88	88	37	20
48/ 47		2.3	4.3	2.0	1.2	.2													60	60	62	21
46/ 45	.2	2.7	3.2	1.3	.7	.2													49	49	74	44
44/ 43	.2	3.3	2.3	2.3	.7	.2													54	54	75	35
42/ 41		3.2	4.3	1.8	1.2														63	63	64	63
40/ 39	1.3	2.0	3.3	.2															41	41	55	64
38/ 37	.7	3.3	1.7	.5															37	37	65	71
36/ 35	.3	2.2	1.7	.3															27	27	54	50
34/ 33		1.5	.7	.3															15	15	32	55
32/ 31	.2	1.7	.5																14	14	22	62
30/ 29	.2	.2																	2	2	10	39
28/ 27																					4	31
26/ 25																						14
24/ 23																						11
22/ 21																						5
20/ 19																						3
18/ 17																						1
16/ 15																						1
TOTAL	3.3	27.1	32.8	18.2	13.5	4.3	.7												598	598	598	598
Element (X)	Σ x ²		Σ x		Σ		Σ x		No. Obs.		Mean No. of Hours with Temperature											Total
Rel. Hum.	3242857		43181		72,214,458		598		≤ 0 F		≤ 32 F	≥ 67 F	≥ 71 F	≥ 80 F	≥ 93 F							90
Dry Bulb	1292918		27488		46.0 7,016		598				2.4											90
Wet Bulb	1072727		25075		41.9 5,973		598				5.4											90
Dew Point	847619		22141		37.0 6,830		598				25.1											90

REVISOR PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

FORM 0-26-5 (OL A)

10-64

USAFETAC

PSYCHROMETRIC SUMMARY

MAY
MONTH

[illegible]

PSYCHROMETRIC SUMMARY

YEARS

PAGE 1 0300-0500
HOURS (L. S. T.)

[illegible]

PSYCHROMETRIC SUMMARY

YEARS _____ MAY _____
 MONTH _____
 PAGE 1 0600-0800

[illegible]

PSYCHROMETRIC SUMMARY

MAY
MONTH

STATION

STATION NAME

YEARS

MONTH

PAGE 1

0900-1100

HOURS (L. S. T.)

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PSYCHROMETRIC SUMMARY

MAY
MAY 1

PAGE 1 1500-1700

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																															TOTAL		TOTAL	
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B. W.B.	Dry Bulb	Wet Bulb	Dew Point														
86/ 85														.6				4	4																
84/ 83									.2	.3	.2	.6	.3					10	10																
82/ 81								.2	.2	.5	.5	.2	.2					10	10																
80/ 79								.2		.3	.5	.3						8	8																
78/ 77						.3	.2	.3	.6	1.0	.5							18	18																
76/ 75							.2	.8	1.4	.6	.6							23	23																
74/ 73						.2	.5	2.9	1.0	.2								29	29																
72/ 71					.8	.2	1.4	1.9	.8	.6								36	36																
70/ 69					.2	.3	2.1	2.2	1.3	.6								42	42																
58/ 67				.3	.6	2.2	3.0	3.4	.5	.2								64	65	6															
66/ 65		.2	.5	1.1	.5	2.2	3.0	1.3	1.0									61	61	6															
64/ 63		.3	.5	1.8	1.6	1.9	2.1	.6	.8									60	60	14	1														
62/ 61	.3	.2	.6	1.1	1.9	1.8	1.4	1.0										52	52	36	7														
60/ 59		.6	1.0	1.3	.6	1.4	.6	.8	.2									41	41	89	12														
58/ 57	.2	.5	1.4	1.8	.8	1.4	1.1											45	45	73	11														
56/ 55		.2	1.1	1.4	1.4	1.1	.8											38	38	82	20														
54/ 53	.2	.8	2.1	1.1	.5	.2												30	30	93	24														
52/ 51	.2	1.1	.8	1.0	.3													21	21	58	46														
50/ 49		.6	.6	.6	1.1	.2												20	20	69	103														
48/ 47		.2		.2	.2													3	3	46	78														
46/ 45		1.0		.2														7	7	32	71														
44/ 43		.2																1	1	12	61														
42/ 41		.3																3	3	5	64														
40/ 39																				5	39														
38/ 37																					16														
36/ 35																					25														
34/ 33																					21														
32/ 31																					21														
30/ 29																					3														
28/ 27																					3														
TOTAL	.8	6.2	8.6	11.8	10.5	13.4	16.5	15.5	7.8	4.3	2.2	1.1	.5	.6				626	627	626	626														

PSYCHROMETRIC SUMMARY

MAY

STATION

STATION NAME

YF 195

140824

PAGE 1 1800-2000

1800-2000

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL D.B. W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb	Wet Bulb	Dew Point				
84/ 83										.2			.2					2	2					
82/ 81									.2		.2							2	2					
80/ 79								.2		.5		.3	.3					8	8					
78/ 77								.3	.2	.6								7	7					
76/ 75							.2	.3		.5								6	6					
74/ 73					.2	.2	.5	.5	.3	.3								12	12					
72/ 71				.2	.8	.9	.8	.5										20	20					
70/ 69			.3	.3	.9	.9	.6	.2										21	21	1				
68/ 67		.2		.3	.3	2.2	2.7	1.3	.2	.2								46	46	1				
66/ 65			.3	.8	1.1	2.1	1.3	.6	.5									42	42	4				
64/ 63		.8	.2	1.6	2.5	2.5	2.4	.6	.3									69	69	11				
62/ 61	.2	.5	.8	2.2	2.8	1.6	.8	.5										59	59	28				
60/ 59	.3	1.9	1.6	2.8	3.8	2.7	.8	.3										90	90	45				
58/ 57	.5	1.7	.6	2.8	2.1	.9	.8											60	60	77				
56/ 55		.2	2.2	2.2	1.1	.9	.5											45	45	90				
54/ 53		1.1	2.1	.5	.6	.9												33	33	79				
52/ 51	.2	1.9	2.8	1.3	.5	.2	.2											44	44	79				
50/ 49		1.4	1.6	1.1	.5													9	29	80				
48/ 47			1.4	.8	.5													17	17	51				
46/ 45		.6	.5	.2														8	8	41				
44/ 43		1.1	.3															9	9	26				
42/ 41		.3																2	2	13				
40/ 39		.2																1	1	5				
38/ 37																				1				
36/ 35																								
34/ 33																								
32/ 31																								
30/ 29																								
28/ 27																								
26/ 25																								
TOTAL	1.1	11.9	14.4	16.9	16.5	16.0	11.9	6.2	2.1	2.4	.3	.3	.2					632	632	632				
Element (X)	Σ X ²		Σ X		Σ		Σ		Σ		No. Obs.													

PSYCHROMETRIC SUMMARY

JUN

HOURS (L. S. T.)

[illegible]

PSYCHROMETRIC SUMMARY

JUN
MONTH

1022
STATION

STATION NAME

YEARS

MONTE

PAGE 1 0300-0500

0300-0500

[illegible]

PSYCHROMETRIC SUMMARY

JUN

STATION

STATION NAME

YEARS

MONTM

PAGE 1 0600-0800

0600-0800

HOURS (L. S. T.)

[illegible]

0-26-5 (01 A)

USAFETAC

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RHEIN-MAIN APT GERMANY/FRANKFURT

67-76

JUN

PAGE 1

0900-1100

HOURS (L, S, F.)

USAFETAC FORM 0-26-5 (OLA) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

PSYCHROMETRIC SUMMARY

JUN
MONTH

PAGE 1 1200-1400
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																															TOTAL		TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	W.B.	Dry Bulb	Wet Bulb	Dew Point															
94/ 93															.2			1	1																	
92/ 91														.7	.2			5	5																	
90/ 89											.2		.2	.7	.5			9	9																	
88/ 87										.2		.2	.5					5	5																	
86/ 85										.3		.5	.2					6	6																	
84/ 83									.5	.5	.5	.5						12	12																	
82/ 81							.2	.7	.3	.2	1.2	.3	.2					18	18																	
80/ 79							.5	.5	1.3	.8	.7	.3	.2					26	26																	
78/ 77					.5	.5	1.5	2.0	2.8	1.0	.8							55	55																	
76/ 75				.3	.3	.5	1.5	2.0	.8		.2							34	34																	
74/ 73			.2	.2	.3	1.0	2.5	1.2	.2	.8	.2							39	39																	
72/ 71			.2	1.3	1.2	2.0	2.0	.5	.3									45	45	1																
70/ 69		.2	.7	.5	1.2	1.7	.8	1.0	.3									38	38	9	1															
68/ 67			.5	1.2	1.5	2.5	1.8	.8	.2									51	51	21	1															
66/ 65			1.3	1.0	.8	1.5	2.5	.5										46	46	43	6															
64/ 63		.3	1.7	1.0	1.5	1.8	1.5	.2										48	48	76	8															
62/ 61			1.3	1.2	1.5	.8	.7											33	33	93	15															
60/ 59		1.0	1.2	2.0	2.3	2.3	.3											55	55	66	42															
58/ 57	.5	1.3	1.3	1.0	2.5	.3	.2											43	43	70	47															
56/ 55		.3	.8	.5	.7	.3												16	16	70	30															
54/ 53	.2		1.0	.5														10	10	60	59															
52/ 51		.2	.3	.2														4	4	37	65															
50/ 49		.2	.3	.2														4	4	41	88															
48/ 47																				10	48															
46/ 45		.2																1	1	6	49															
44/ 43																				1	44															
42/ 41																					55															
40/ 39																					15															
38/ 37																					8															
36/ 33																					2															
32/ 31																					1															
TOTAL	.7	3.6	10.6	9.8	14.4	14.4	15.9	10.8	7.0	4.1	3.6	1.8	1.2	1.3	.3			604	604		604															
																		604		604																
Element (X)	Σx ²			Σx			X			x _̄			No. Obs.			Mean No. of Hours with Temperature																				
Rel. Hum.	1976120			33022			54.716			827			604			≤ 0 F			≤ 32 F			≥ 67 F			≥ 73 F			≥ 80 F			≥ 93 F			Total		
Dry Bulb	2903567			41531			68.8			8.913			604									51.3			31.3			10.4			.1			90		
Wet Bulb	2071826			35226			58.3			5.372			604									4.6												90		
Dew Point	1564370			30494			50.5			6.417			604									.1			.3									90		

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 67-76

JUN

STATION

STATION NAME

YEARS

MONTH

PAGE 1

1500-1700

HOURS (L. S. T.)

Temp (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL D.B. W.B.	TOTAL												
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	+31	Dry Bulb	Wet Bulb	Dew Point														
92/ 91														.2	1.0			7	7															
90/ 89											.2	.2		1.0	.3			10	10															
88/ 87										.2	.2		.3					4	4															
86/ 85										.3		.7	.3					8	8															
84/ 83									.2	.2	.7	1.2	.5					16	16															
82/ 81							.2	1.0	.7	.8	1.0	.3	.3					26	26															
80/ 79						.2	.7	1.5	1.2	1.0	.5							30	30															
78/ 77				.2	.3	.2	.3	1.8	2.8	1.5	.2	.3						46	46															
76/ 75				.3		.2	.8	1.5	1.8	.3		.2						31	31															
74/ 73			.2	.3	.3	1.0	1.6	1.5	.2	1.6	.2							42	42															
72/ 71		.2	.5	1.0	1.2	1.0	2.3	.3										39	39	2														
70/ 69	.2	.3	.2	2.3	2.0	1.0	1.6	.8										51	51	12														
68/ 67		.3	.5	2.0	1.2	2.3	2.6	1.2	.2									62	62	21	6													
66/ 65		.3	1.2	1.3	1.2	.8	1.6	.3										41	41	34	5													
64/ 63		.8	1.2	1.6	1.3	1.8	1.6	.2										52	52	87	10													
62/ 61		1.2	.2	.5	1.2	.7	1.0											28	28	94	13													
60/ 59	.2	1.0	.5	1.8	1.3	.8	.2	.3										37	37	83	45													
58/ 57	.2	1.3	1.0	1.2	.8	.2	.2											29	29	70	45													
56/ 55	.2	1.2	1.5	.7														21	21	55	58													
54/ 53		1.0	.5	.8	.2													15	15	66	49													
52/ 51		1.0	.3															8	8	42	56													
50/ 49	.2	.2	.3															4	4	30	105													
48/ 47																				7	65													
46/ 45		.2																1	1	5	57													
44/ 43																					37													
42/ 41																					29													
40/ 39																					12													
38/ 37																					10													
36/ 35																					3													
32/ 31																					2													
30/ 29																					1													
TOTAL	.7	8.6	7.7	11.3	11.0	11.2	12.8	13.2	8.1	5.9	2.8	2.8	1.5	1.2	1.3			608		608		608												
																		608		608														
Element (X)	Σ X ²		Σ X		Σ X		Σ X		Σ X		Σ X		Σ X		Σ X		Σ X		Σ X		Σ X		Σ X		Σ X		Σ X		Σ X		Σ X		Σ X	
Rel. Hum.	2052480		3454		55.0		18.6		77		608		≤ 0 F		≤ 32 F		≤ 67 F		≤ 73 F		≥ 80 F		≥ 93 F		Total									
Dry Bulb	2967352		42114		69.3		9.100		608						55.1		32.6		11.7						90									
Wet Bulb	2110317		35681		58.7		5.189		608						5.2										90									
Dew Point	1596078		30906		50.8		6.425		608						.4		.9								90									

USAFETAC FORM 0-26-5 (JUL 64) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

2

YEARS

JUN

MONIH

0.26-5 (OL A)
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

USAFETAC

PSYCHROMETRIC SUMMARY

JUN
MAY 1964

PAGE 1 2100-2300

HOURS (L, S, T, I)

[illegible]

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2

YEARS

JUL
MON

HOURS 11 - 5 - T.

0-26.5 (Q1 A) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

0.26-5 (OL A)

USAFETAC

PSYCHROMETRIC SUMMARY

JUL
MON

PAGE 1 0300-0500
HOURS (L. S. T.)

FORM 0-26-5 (OLA)
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

USAFETAC

PSYCHROMETRIC SUMMARY

JUL
MON

0600-0800
HOURS (L S 7.1)

[illegible]

PSYCHROMETRIC SUMMARY

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 67-76

JUL

PAGE 1 0900-1100
HOURS (L. S. T.)

[illegible]

PSYCHROMETRIC SUMMARY

JUL
1954

HOURS 6.50

[illegible]

PSYCHROMETRIC SUMMARY

JUL
MON

PAGE 1 1500-1700

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																															TOTAL		TOTAL	
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B. W.B.	Dry Bulb	Wet Bulb	Dew Point														
95/ 95													.2	.3	.2	.2	.5	8	8																
94/ 93												.2				.2	.3	4	4																
92/ 91												.3		.2	.2			5	5																
90/ 89									.2		.5	.6	.3	.6		.2		14	14																
88/ 87									.6	.6	1.1	.3				.3		19	19																
86/ 85						.2		.5	1.5	3.2	.6	.6	.2	.2	.5	.2		47	47																
84/ 83					.3	.2		.2	.3	1.0	.5		.2					21	21																
82/ 81							.6	2.4	1.6	3.2	.8							54	54																
80/ 79					.2	.6	.6	2.7	1.6	.3	.3							40	40																
78/ 77					.3	.5	1.6	1.9	2.3	.2								42	42																
76/ 75				.5	.2	.5	2.1	2.7	.6									41	41	4															
74/ 73		.5		.3		2.4	1.0	1.3	1.0									40	40	2															
72/ 71				.5	1.1	1.6	2.7	2.3	1.0									57	57	20	2														
70/ 69				.5	2.1	1.6	2.1	1.0										45	45	41	2														
68/ 67		.3	1.5	1.9	1.3	2.7	2.3	1.0	.2									69	69	63	8														
66/ 65		1.1	.6	.6	.8	1.5	.5	.2										33	33	77	11														
64/ 63		.8	.5	.8	1.0	1.5	.3											30	30	107	33														
62/ 61		.8	1.0	1.1	.5	.3												23	23	82	32														
60/ 59	.3	1.0	.3	.6	.5													17	17	76	80														
58/ 57		.5	.6	.2														8	8	71	83														
56/ 55		.2																1	1	43	58														
54/ 53	.2	.2																2	2	28	65														
52/ 51																				6	76														
50/ 49																					70														
48/ 47																					39														
46/ 45																					32														
44/ 43																					13														
42/ 41																					9														
40/ 39																					1														
38/ 37																					2														
36/ 35																					2														
34/ 33																																			
TOTAL	.5	.8	5.0	7.1	8.2	13.5	14.0	16.3	11.5	8.1	4.2	2.1	.																						

PSYCHROMETRIC SUMMARY

JUL
MONTH
2100-2300
HOURS (L. S. T.)

PAGE 1

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USAFETAC
FORM 0-26-5 (OL A)
JUL 64
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

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35032
STATION

67-76

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HOURS 11 5 7

0-26-5 (OL A) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

USAFETAC

PSYCHROMETRIC SUMMARY

AUG
MONTH

STATION

STATION NAME

YEARS

MONTH

PAGE 1

0300-0500

HOURS (L, S, T)

[illegible]

2

YFARS

AUG

STATION

STATION NAME

67-76

MONTH

PAGE 1

0600-0800

HOURS (1 5 9)

REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

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22

42

PSYCHROMETRIC SUMMARY

AUG
MONTH

PAGE 1 1200-1400
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL	TOTAL		
	0	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21	22	23 - 24	25 - 26	27 - 28	29 - 30	≥ 31	D.B. W.B.	Dry Bulb	Wet Bulb	Dew Point		
96/ 95															.2	.2			1	1				
94/ 93															.2				1	1				
92/ 91															.2				1	1				
90/ 89											.2	.8			.2				7	7				
88/ 87									.2	.2	.5	.6			.2				10	10				
86/ 85								.6	1.0	1.4	1.0	1.0							31	31				
84/ 83							.3	.3	1.0	2.2	.3	.3			.2				29	29				
82/ 81						.3	1.4	.8	1.0	1.1	1.1	.3	.3		.2				39	39				
80/ 79						.6	.3	1.6	1.4	1.1	.5	.3			.2				38	38				
78/ 77						1.4	2.2	1.9	2.9	2.5	.3				.2				72	72				
76/ 75					1.0	1.9	1.4	2.2	1.1	.3	.2								51	51				
74/ 73				.2	1.1	1.8	1.1	2.1	.3	.2		.2							43	43	1			
72/ 71			.5	.5	2.1	1.4	2.4	1.4	.6	.3									58	58	15			
70/ 69		.3	1.4	.6	1.4	2.2	.8	.8	.2										49	49	25			
68/ 67		.2	1.9	.8	1.6	2.9	2.2	.3											62	62	66	2		
66/ 65		.6	.8	.8	2.1	1.8	.8	.2											44	44	87	19		
64/ 63	.5	1.6	1.3	1.0	1.1	1.1	.3												43	43	97	50		
62/ 61	.3	.6	.5	1.0	1.6														25	25	94	37		
60/ 59		1.3	.5	.3	.5	.2													17	17	91	86		
58/ 57		.3	.2	.2															4	4	72	61		
56/ 55		.2																	1	1	51	55		
54/ 53		.3																	2	2	24	64		
52/ 51																					4	76		
50/ 49																					1	72		
48/ 47																						41		
46/ 45																						36		
44/ 43																						12		
42/ 41																						10		
40/ 39																						3		
38/ 37																						2		
34/ 33																						2		
TOTAL	.8	5.4	7.0	5.3	12.4	15.6	13.4	12.3	9.6	9.4	4.0	3.5	1.3	.2						628	628	628		
																			628		628			
Element (X)	ΣX ²			ΣX		X		σ _x		No. Obs.		Mean No. of Hours with Temperature												
Rel. Hum.	2022211			34031		54.2		16.853		628		≤ 0 F		≤ 32 F		≥ 67 F		≥ 73 F		≥ 80 F		≥ 93 F		Total
Dry Bulb	3400391			45963		73.2		7.617		628						72.9		47.8		21.2		.3		93
Wet Bulb	2425410			38926		62.0		4.486		628						15.8		.1						93
Dew Point	1882737			34173		54.4		6.082		628						.3								93

USAFETAC FORM 0-26-5 (OLA)
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PSYCHROMETRIC SUMMARY

AUG

STATION

STATION NAME

YFARS

MONTH

PAGE 1

1500-1700

HOURS (1, 5, ?)

[illegible]

PSYCHROMETRIC SUMMARY

AUG
MONTH

PAGE 1 1800-2000
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																															TOTAL		TOTAL	
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B.-W.B.	Dry Bulb	Wet Bulb	Dew Point														
88/ 87											.3		.2					3	3																
86/ 85							.2		.3		.3	.6						9	9																
84/ 83							.2	.2	.2	.6	.5	.2						11	11																
82/ 81							.6	.9	.8	.2	.2							18	18																
80/ 79					.2	.3		1.1	.6	.6		.2						19	19																
78/ 77					.9	.6	2.5	1.4	1.4	.5	.2	.2						49	49																
76/ 75				.2	.8	.6	2.4	.8	1.4			.2						40	40																
74/ 73				1.3	.9	2.7	1.6	1.7	.3	.3								56	56	1															
72/ 71			.8	.9	2.8	.9	2.5	.5		.3								56	56	4															
70/ 69		.3	1.3	.8	2.2	2.2	1.9	.6	.2									60	60	21															
68/ 67	.2	.3	1.7	1.7	2.2	3.9	1.1	.8		.2								77	77	40	7														
66/ 65		.5	1.4	1.4	1.7	1.4	.8											46	46	71	15														
64/ 63	.3	2.2	1.1	2.7	2.2	1.4	.8	.3										70	70	96	47														
62/ 61	.2	2.4	1.4	2.8	.8	.3	.2	.2										52	52	81	39														
60/ 59	.8	1.7	1.1	2.2	.6	.2												42	42	109	81														
58/ 57	.2	.9	.3	.5														12	12	88	72														
56/ 55		1.4		.3														11	11	57	71														
54/ 53		.2	.2															2	2	46	53														
52/ 51																				14	82														
50/ 49																				4	75														
48/ 47																				1	36														
46/ 45																					21														
44/ 43																					13														
42/ 41																					13														
40/ 39																					5														
34/ 33																					2														
32/ 31																					1														
TOTAL	1.6	10.0	9.3	14.8	15.5	14.7	14.7	8.5	5.2	2.7	1.4	1.4	.2					633	633		633														
																		633		633															
				</																															

PSYCHROMETRIC SUMMARY

AUG

STATION

STATION NAME

YEARS

MONTH

PAGE 1

2100-2300

HOURS (L, S, T.)

[illegible]

USAFETAC FORM 0.26-5 (01 A) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

PSYCHROMETRIC SUMMARY

SEP
MONTH

PAGE 1 0000-0200
HOURS (L. S. T.)

[illegible]

PSYCHROMETRIC SUMMARY

SEP

STATION

STATION NAME

165

MON'D

PAGE 1 0300-0500
HOURS (G. S. T.)

[illegible]

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SEP

NOJRS (L. S. T.)

REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

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PSYCHROMETRIC SUMMARY

SEP
MON

PAGE 1 0900-1100
HOURS (L. S. T.)

[illegible]

PSYCHROMETRIC SUMMARY

SEP
MONTH

PAGE 1 1200-1400

[illegible]

PSYCHROMETRIC SUMMARY

SEP

PAGE 1 1500-1700
HOURS (L. S. T.)

PSYCHROMETRIC SUMMARY

SEP

STATION

STATION NAME

YEARS

MONTH

PAGE 1

1800-2000

HOURS (L, S, T.)

[illegible]

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 67-76

SEP
MONTH

PAGE 1 2100-2300
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17	19-20	21-22	23-24	25-26	27	28	29-30	≥ 31	D.B. W.B.	Dry Bulb	Wet Bulb	Dew Point		
72/ 71					.2	.2	.2	.2											4	4				
70/ 69				.3	.3	.2													5	5				
68/ 67			.8	.7	.8	.2													15	15				
66/ 65		.7	2.0	1.0	.5														25	25	1			
64/ 63		2.8	2.8	.8	.7														43	43	15	3		
62/ 61	.3	4.6	2.3	1.3															52	52	42	22		
60/ 59	.5	5.6	3.6	1.5	.5	.2													72	72	63	43		
58/ 57	1.2	4.0	4.0	1.3	.8	.2													69	69	67	58		
56/ 55	.8	4.6	2.5	1.2	.5														58	58	64	53		
54/ 53	.8	5.0	3.0	1.3	.2														62	62	80	56		
52/ 51	1.7	4.6	3.8	.2															62	62	58	75		
50/ 49	.7	6.1	3.3	.2															62	62	73	81		
48/ 47	.3	3.8	1.2	.2															33	33	65	56		
46/ 45	.5	2.2																	16	16	35	62		
44/ 43	.2	2.0	.3																15	15	22	42		
42/ 41	.2	1.2	.2																9	9	11	32		
40/ 39	.2																		1	1	6	13		
38/ 37																					1	3		
36/ 35																						2		
34/ 33																						2		
TOTAL	7.3	47.3	29.9	10.0	4.5	.8	.2	.2											603	603	603	603		
	</																							

USAFETAC FORM 0-26-5 (OL A) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

PSYCHROMETRIC SUMMARY

OC 1
MONTH

PAGE 1 0000-0200

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REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

26.5 (OL A)

100

USAFETAC

PSYCHROMETRIC SUMMARY

OCT
MONTH

0300-0500

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0-26:5 (01 A) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

0.26-5 (01 A)

USAFETAC

PSYCHROMETRIC SUMMARY

OCT
MONTH

PAGE 1 0600-0800
HOURS (L. S. *)

[illegible]

PSYCHROMETRIC SUMMARY

06 T
MONTH

PAGE 1 0900-1100

HOURS (L, S, T,)

USAFETAC FORM 0-26-5 (OLA)
REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

PSYCHROMETRIC SUMMARY

DC T

STATION	STATION NAME
750	NINE SW PAIRN A. V. CENTRA

YEARS

MONT

PAGE 1 1200-1400
HOURS (L. S. T.)

[illegible]

0-26.5 (N1 A) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

FORM

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35032 STATION RHEIN-MAIN APT GERMANY/FRANKFURT 07-76 YEARS OCT MONTH
PAGE 1 1500-1700
HOURS (L. S. T.)

USAFETAC FORM 0-26-5 (OL A)
JUL 94 REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

PSYCHROMETRIC SUMMARY

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PAGE 1 0000-0200
HOURS 11. 5. 7.1

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PSYCHROMETRIC SUMMARY

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PAGE 1 0300-0500

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DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 67-76

NOV
MONTH

PAGE 1 0900-1100
HOURS (L. S. T.)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																	TOTAL	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	D.B. W.B.	Dry Bulb	Wet Bulb	Dew Point
60/ 59				.2														1	1		
58/ 57			.2															1	1		
56/ 55		.3	.3	.2	.3													7	7		
54/ 53			.5	.3														5	5	4	
52/ 51		.8	1.6	.3	.2													18	18	5	2
50/ 49	.2	2.6	3.6	.3														41	41	16	9
48/ 47	1.3	3.0	2.8	.8														48	48	44	27
46/ 45	1.8	6.6	2.0	.5	.2													67	67	54	33
44/ 43	1.6	9.5	1.6	.7														82	82	65	55
42/ 41	1.5	9.8	2.8	.3	.2													89	89	88	72
40/ 39	1.8	5.2	2.8	.2	.2													62	62	82	77
38/ 37	2.0	5.1	.3															45	45	69	76
36/ 35	.8	4.4	.7															36	36	49	45
34/ 33	2.6	4.8	.3															47	47	60	67
32/ 31	2.8	2.5	.3															34	34	42	71
30/ 29	.7	1.3																12	12	13	36
28/ 27	1.0	.7	.2															11	11	10	17
26/ 25		.3																2	2	6	9
24/ 23	.2	.2																2	2	3	7
22/ 21																					3
20/ 19																					2
18/ 17																					2
TOTAL	18.2	57.0	20.0	3.8	1.0													610	610	610	610
Element (X)	Σx ²		Σx		Σ		Σ		Σ		No. Obs.		Mean No. of Hours with Temperature								Total
Rel. Hum.	4623579		52745		86.510.160		610		≤ 0 F		≤ 32 F		≥ 67 F		≥ 73 F		≥ 80 F		≥ 93 F		Total
Dry Bulb	1056777		25109		41.2.6.177		610				9.0										90
Wet Bulb	968908		24064		39.4.5.674		610				10.9										90
Dew Point	870248		22730		37.3.5.981		610				21.7										90

PSYCHROMETRIC SUMMARY

NOV

092
STATION

STATION NAME

YEARS

MONTE

PAGE 1 1200-1400

1200-1400

[illegible]

PSYCHROMETRIC SUMMARY

NOV
MONTH

STATION

STATION NAME

YEARS

MONTH

PAGE 1

1500-1700

HOURS (L, S, T.)

[illegible]

PSYCHROMETRIC SUMMARY

NOV
MONTH

PAGE 1 1800-2000
HOURS (L. S. T.)

[illegible]

PSYCHROMETRIC SUMMARY

NOV
MONTH

[illegible]

PSYCHROMETRIC SUMMARY

DEC
MONT

PAGE 1 0000-0200

HOURS 11-5 P.M.

[illegible]

2

2

35032
STATIA

RHEIN-MAIN APT GERMANY/FRANKFURT

67-76

DEC

MONTH

PAGE 1

0300-0500

HOURS (L, S, T)

REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

6.26.5 (OL A)

FORM

USAF.ETAC

PSYCHROMETRIC SUMMARY

DEC
MONT

PAGE 1 0600-0800
HOURS (L.S.T.)

[illegible]

PSYCHROMETRIC SUMMARY

YEARS

DEC
MONTH

PAGE 1 0900-1100

[illegible]

USAFETAC FORM 0.26-5 (OL A) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

PSYCHROMETRIC SUMMARY

DEC

HOURS (L, S, T.)

[illegible]

USAFETAC FORM 0-26-5 (OLA)

USAFETAC

PSYCHROMETRIC SUMMARY

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 67-76
STATION STATION NAME

DEC
MONT

PAGE 1 1500-1700

[illegible]

PSYCHROMETRIC SUMMARY

DEC
MON

PAGE 1 1800-2000

1800-2000
HOURS (L. S. T.)

[illegible]

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

PSYCHROMETRIC SUMMARY

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 67-76

DEC

STATION

STATION NAME

YEARS

MONTH

PAGE 1 2100-2300

HOURS (L, S, T)

Temp. (F)	WET BULB TEMPERATURE DEPRESSION (F)																				TOTAL D.B., W.B.	TOTAL		
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28	29-30	≥ 31	Dry Bulb	Wet Bulb	Dew Point				
56/ 55			.5																3	3				
54/ 53																					1			
52/ 51		.6	.3																6	6	3			
50/ 49	.2	2.8	.8	.2															25	25	9			
48/ 47		1.3	.8																13	13	18			
46/ 45	.5	1.7	.8	.3															21	21	14			
44/ 43	.5	3.2	.2	.2															25	25	23			
42/ 41	1.1	7.9	1.9																69	69	31			
40/ 39	.3	5.4	2.4																51	51	57			
38/ 37	1.9	6.2	.9																57	57	68			
36/ 35	.5	9.1	.3																63	63	65			
34/ 33	3.8	4.9	.9																61	61	87			
32/ 31	3.9	6.9	.6																73	73	60			
30/ 29	1.4	3.6	.3																34	34	50			
28/ 27	3.9	2.7	.2																43	43	39			
26/ 25	1.7	.8																	16	16	27			
24/ 23	1.1	2.2																	21	21	16			
22/ 21	.5	.8																	8	9	16			
20/ 19	.8	1.1																	12	12	12			
18/ 17	2.4	.6																	19	19	22			
16/ 15	.2																		1	1	1			
14/ 13	.5	.5																	6	6	5			
12/ 11		.2																	1	1	2			
10/ 9	.3																		2	2	2			
8/ 7	.2																		1	1	1			
6/ 5	.3																		2	2	2			
4/ 3	.2																		1	1	1			
2/ 1																								
TOTAL	26.06	2.5	10.9	.6															634	635	634			
Element (X)	Σ X ²		Σ X		Σ X		Σ X		Σ X		Σ X		Σ X		Σ X		Σ X		Σ X		Σ X			
Rel. Hum.	4933396		55678		87.8		8.332		634		± 0 F		± 32 F		± 67 F		± 73 F		± 80 F		± 93 F			
Dry Bulb	805719		21967		34.6		8.499		635				35.9								93			
Wet Bulb	746494		21150		33.4		8.042		634				37.6								93			
Dew Point	667138		19854		31.2		8.469		634				51.8								93			

FORM 0-26-5 (OL A) REVISED PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

USAF ETAC

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

MEANS AND STANDARD DEVIATIONS

DRY-BULB TEMPERATURES DEG F FROM HOURLY OBSERVATIONS

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 07-76

STATION		STATION NAME							YEARS						
HRS. (L.S.T.)		JAN.	FEB.	MAR.	APR.	MAY	JUN	JUL	AUG.	SEP.	OCT.	NOV.	DEC.	ANNUAL	
00-02	MEAN	33.7	34.2	37.0	42.4	50.2	55.7	60.0	59.6	52.8	45.0	38.6	33.9	45.3	
	S. D.	8.586	6.233	7.414	6.887	6.564	6.724	5.831	5.127	6.340	7.072	6.472	8.687	11.883	
	TOTAL OBS	627	577	626	594	617	605	611	614	602	604	587	624	7288	
03-05	MEAN	33.2	33.6	35.6	40.8	48.5	54.2	58.2	57.7	51.3	44.1	38.1	33.9	44.0	
	S. D.	9.037	6.463	7.395	7.018	6.608	6.457	5.605	5.210	6.597	7.076	6.545	8.754	11.513	
	TOTAL OBS	647	580	641	610	629	601	615	629	612	625	630	646	7465	
06-08	MEAN	33.1	33.2	36.4	43.4	52.8	58.8	62.4	61.0	53.1	44.4	38.4	33.7	45.9	
	S. D.	9.130	6.349	7.387	6.864	6.274	6.452	6.273	5.642	6.318	6.707	6.446	8.914	12.834	
	TOTAL OBS	640	579	642	623	635	620	621	634	616	631	628	641	7510	
09-11	MEAN	35.1	36.8	42.3	50.3	59.7	65.1	69.4	68.5	60.4	49.5	41.2	35.3	51.2	
	S. D.	8.594	5.958	7.533	7.512	7.359	7.882	7.947	6.803	6.364	6.517	6.177	8.289	14.510	
	TOTAL OBS	638	586	642	622	638	623	625	651	619	645	610	647	7546	
12-14	MEAN	37.5	40.3	46.6	54.6	63.3	68.8	73.2	73.2	65.1	53.7	43.7	37.2	54.7	
	S. D.	7.834	5.990	8.345	8.911	8.359	8.913	8.761	7.617	7.429	7.355	6.253	7.507	15.263	
	TOTAL OBS	634	582	647	616	630	604	599	628	605	630	603	633	7411	
15-17	MEAN	37.8	40.7	47.6	55.3	64.2	69.3	74.4	74.4	65.6	53.6	43.2	36.7	55.2	
	S. D.	7.662	5.777	8.816	9.072	8.517	9.100	8.713	7.853	7.742	7.818	6.408	7.486	15.674	
	TOTAL OBS	626	585	634	624	627	608	620	631	622	640	610	650	7477	
18-20	MEAN	35.5	37.4	43.3	51.1	60.2	65.8	70.8	69.2	60.0	48.8	40.9	34.8	51.4	
	S. D.	8.191	5.466	7.941	8.277	7.680	8.708	8.040	6.971	6.858	6.743	6.304	8.006	14.820	
	TOTAL OBS	647	590	646	606	632	625	612	633	607	635	621	632	7486	
21-23	MEAN	34.8	35.6	39.6	46.0	54.3	60.0	64.3	63.1	55.7	46.2	39.8	34.6	47.8	
	S. D.	8.598	5.693	7.475	7.016	6.298	7.223	6.205	5.266	6.227	6.709	6.436	8.499	12.780	
	TOTAL OBS	648	592	627	598	636	606	611	638	603	640	617	635	7451	
ALL HOURS	MEAN	35.1	36.8	41.1	48.0	56.7	62.2	66.6	65.8	58.0	48.2	40.5	35.0	49.5	
	S. D.	8.631	6.569	8.917	9.337	9.157	9.470	9.290	8.720	8.540	7.908	6.682	8.367	14.323	
	TOTAL OBS	5107	4671	5105	4893	5044	4892	4914	5058	4886	5050	4906	5108	59634	

2

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

MEANS AND STANDARD DEVIATIONS

WET-BULB TEMPERATURES DEG F FROM HOURLY OBSERVATIONS

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 67-76

STATION		STATION NAME					YEARS											
HRS. (L.S.T.)		JAN.	FEB.	MAR.	APR.	MAY	JUN	JUL	AUG	SEP.	OCT	NOV.	DEC	ANNUAL				
00-02	MEAN	32.6	32.8	35.1	39.8	47.8	52.8	56.9	56.8	51.2	43.8	37.4	32.8	43.3				
	S. D.	8.157	5.778	7.034	6.226	5.979	5.730	5.116	4.740	5.990	6.657	6.018	8.260	11.118				
	TOTAL OBS	627	577	625	594	617	605	611	614	602	603	587	624	7286				
03-05	MEAN	32.3	32.5	34.2	38.8	46.6	51.9	55.9	55.6	50.2	43.1	37.1	32.8	42.5				
	S. D.	8.631	6.024	7.076	6.378	6.165	5.622	5.188	5.000	6.254	6.809	6.149	8.352	10.982				
	TOTAL OBS	647	579	641	609	629	601	615	629	612	625	630	645	7462				
06-08	MEAN	32.1	32.1	34.7	40.4	49.3	54.5	58.2	57.6	51.4	43.4	37.3	32.6	43.6				
	S. D.	8.729	5.882	6.916	6.101	5.424	5.040	4.864	4.704	5.785	6.509	6.101	8.457	11.601				
	TOTAL OBS	640	579	642	622	635	620	621	634	616	631	628	641	7509				
09-11	MEAN	33.8	34.7	38.5	44.3	52.7	57.3	61.0	60.9	55.6	47.7	39.4	33.9	46.6				
	S. D.	8.175	5.441	6.601	5.787	5.537	5.235	4.987	4.397	5.131	5.854	5.674	7.839	11.786				
	TOTAL OBS	638	586	642	622	638	623	625	651	619	645	610	645	7544				
12-14	MEAN	35.5	36.7	40.8	46.2	53.7	58.3	61.8	62.0	57.3	48.8	40.9	35.2	48.1				
	S. D.	7.376	5.178	6.774	6.024	5.327	5.372	4.893	4.486	5.393	6.009	5.559	7.099	11.464				
	TOTAL OBS	634	582	647	616	630	604	599	628	605	630	603	633	7411				
15-17	MEAN	35.9	37.0	41.3	46.4	54.2	58.7	62.3	62.3	57.5	48.7	40.6	34.9	48.3				
	S. D.	7.276	5.072	6.947	5.965	5.382	5.189	4.813	4.309	5.551	6.269	5.665	7.122	11.565				
	TOTAL OBS	626	584	634	624	626	608	620	631	622	640	610	650	7475				
18-20	MEAN	34.1	35.0	39.0	44.5	52.8	57.5	61.2	60.6	55.1	46.2	39.1	33.4	46.5				
	S. D.	7.867	5.135	6.934	5.908	5.410	5.324	4.931	4.540	5.623	6.232	5.787	7.566	11.755				
	TOTAL OBS	646	589	646	606	632	625	612	633	607	635	621	632	7484				
21-23	MEAN	33.6	33.9	36.9	41.9	50.4	55.2	59.1	58.5	53.1	44.6	38.4	33.4	44.9				
	S. D.	8.187	5.351	7.077	5.973	5.456	5.359	4.786	4.396	5.611	6.382	5.932	8.042	11.347				
	TOTAL OBS	648	592	627	598	636	606	611	638	603	640	617	634	7450				
ALL HOURS	MEAN	33.7	34.3	37.6	42.8	50.9	55.8	59.4	59.3	53.9	45.7	38.8	33.6	45.5				
	S. D.	8.168	5.761	7.384	6.632	6.199	5.865	5.429	5.134	6.262	6.698	6.025	7.904	11.641				
	TOTAL OBS	5106	6668	5104	4891	5043	4892	4914	5058	4886	5049	4906	5104	59621				

USAF ETAC FORM 0-89.5 (OLJ)

DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

MEANS AND STANDARD DEVIATIONS

DEW-POINT TEMPERATURES DEG F FROM HOURLY OBSERVATIONS

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 67-76

STATION		STATION NAME												YEARS	
HRS (LST)		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL	
00-02	MEAN	30.7	30.5	32.0	36.3	45.5	50.4	54.5	54.5	49.9	42.6	35.8	30.9	41.1	
	S.D.	8.586	6.304	7.968	6.805	6.492	5.784	5.653	5.390	6.126	6.807	6.173	8.758	11.426	
	TOTAL OBS	627	577	625	554	617	605	611	614	602	603	587	624	7286	
03-05	MEAN	30.5	30.4	31.7	36.0	44.8	50.0	54.2	54.0	49.3	42.2	35.8	31.0	40.8	
	S.D.	9.138	6.488	7.880	6.851	6.477	5.604	5.648	5.562	6.210	6.958	6.296	8.855	11.355	
	TOTAL OBS	647	579	641	609	629	601	615	629	612	625	630	645	7462	
06-08	MEAN	30.4	30.0	31.9	36.7	46.0	51.0	55.0	54.9	49.9	42.3	35.9	30.6	41.2	
	S.D.	9.150	6.308	7.552	6.733	6.085	5.430	5.557	5.324	5.806	6.741	6.277	8.871	11.586	
	TOTAL OBS	640		642	622	635	620	621	634	616	631	628	641	7509	
09-11	MEAN	31.7	31.4	33.2	37.5	46.4	51.2	55.3	55.6	51.6	44.1	37.3	31.6	42.3	
	S.D.	8.781	6.177	7.787	6.787	6.510	5.959	5.698	5.374	5.802	6.544	5.981	8.405	11.401	
	TOTAL OBS	638	586	642	622	638	623	625	651	619	645	610	645	7544	
12-14	MEAN	32.5	31.5	33.1	37.1	45.4	50.5	54.1	54.4	51.2	43.9	37.5	32.0	41.9	
	S.D.	8.246	6.447	8.416	7.189	6.697	6.417	5.87	6.082	6.352	7.098	6.167	7.954	11.102	
	TOTAL OBS	634	582	647	616	630	604	599	628	605	630	603	633	7411	
15-17	MEAN	33.0	31.8	33.3	36.6	45.5	50.8	54.4	54.2	51.2	44.0	37.4	32.0	42.0	
	S.D.	8.131	6.471	8.560	7.531	6.719	6.425	6.050	5.895	6.577	7.027	6.144	7.935	11.113	
	TOTAL OBS	626	584	634	624	626	608	620	631	622	640	610	650	7475	
18-20	MEAN	31.8	31.4	33.2	36.9	46.2	51.1	54.6	54.8	51.1	43.5	36.8	31.1	41.8	
	S.D.	8.588	6.163	8.377	7.223	6.639	6.192	6.233	6.059	6.391	6.752	6.132	8.204	11.386	
	TOTAL OBS	646	589	646	606	632	625	612	633	607	635	621	632	7484	
21-23	MEAN	31.6	31.0	33.0	37.0	46.7	51.5	55.2	55.0	50.8	42.8	36.6	31.3	41.9	
	S.D.	8.667	6.184	8.319	6.830	6.310	5.652	5.634	5.436	5.910	6.707	6.138	8.469	11.426	
	TOTAL OBS	648	592	627	598	636	606	611	638	603	640	617	634	7450	
ALL HOURS	MEAN	31.5	31.0	32.7	36.8	45.9	50.8	54.7	54.7	50.6	43.2	36.6	31.3	41.6	
	S.D.	8.707	6.340	8.132	7.009	6.515	5.937	5.810	5.666	6.197	6.865	6.198	8.447	11.360	
	TOTAL OBS	5106	4668	5104	4891	5043	4892	4914	5058	4886	5049	4906	5104	59621	

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

RELATIVE HUMIDITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
PERIOD

ALL
MONTH

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO OF OBS
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
JAN	ALL	100.0	100.0	100.0	99.9	99.9	98.7	93.7	78.6	44.2	87.1	5106
FEB		100.0	100.0	99.9	99.5	97.9	92.1	78.8	59.8	29.9	81.4	4668
MAR		100.0	99.9	99.4	96.7	89.9	78.1	60.8	40.1	18.0	73.9	5104
APR		100.0	99.9	97.8	90.0	78.9	65.1	49.2	30.8	13.5	68.0	4891
MAY		100.0	100.0	98.7	92.2	80.9	66.6	53.5	34.9	17.6	69.9	5043
JUN		100.0	100.0	97.5	92.0	80.3	66.8	52.4	33.0	16.6	69.4	4892
JUL		100.0	99.4	97.9	92.0	78.5	64.3	50.1	32.8	16.0	68.7	4914
AUG		100.0	100.0	98.4	91.7	80.9	66.9	53.0	35.8	19.7	70.3	5058
SEP		100.0	100.0	99.9	98.1	92.8	82.5	70.6	51.4	31.6	78.5	4886
OCT		100.0	100.0	100.0	99.4	97.2	91.8	83.8	65.9	42.4	84.0	5049
NOV		100.0	100.0	100.0	99.9	99.6	97.6	90.3	73.9	45.9	86.7	4906
DEC		100.0	100.0	100.0	100.0	99.9	98.7	93.3	78.3	41.5	86.5	5104
TOTALS		100.0	99.9	99.1	96.0	89.7	80.8	69.1	51.3	28.1	77.0	59621

USAFETAC

FORM
JUL 64

10-87-5 (OL A)

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

RELATIVE HUMIDITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
PERIOD

JAN
MONTH

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO OF OBS
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
JAN	00-02	100.0	100.0	100.0	100.0	100.0	99.8	97.4	86.0	52.2	88.9	627
	03-05	100.0	100.0	100.0	100.0	100.0	99.5	98.1	88.3	55.3	89.8	647
	06-08	100.0	100.0	100.0	100.0	100.0	99.8	98.6	89.2	56.9	90.1	640
	09-11	100.0	100.0	100.0	100.0	100.0	99.7	93.6	78.5	44.8	87.5	638
	12-14	100.0	100.0	100.0	99.7	99.5	95.4	83.9	61.5	29.0	82.4	634
	15-17	100.0	100.0	100.0	100.0	99.8	96.8	85.6	64.4	28.9	83.1	626
	18-20	100.0	100.0	100.0	100.0	100.0	99.1	94.9	77.2	39.8	86.5	646
	21-23	100.0	100.0	100.0	99.8	99.8	99.8	97.5	83.8	46.3	88.2	648
TOTALS		100.0	100.0	100.0	99.9	99.9	98.7	93.7	78.6	44.2	87.1	5106

USAFETAC

FORM
RUK 64

0-87-5 (OL, A)

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DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

RELATIVE HUMIDITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-75
PERIOD

MAR
MONTH

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO OF OBS
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
MAR	00-02	100.0	100.0	100.0	100.0	99.5	97.1	84.5	59.7	28.0	82.4	625
	03-05	100.0	100.0	100.0	100.0	99.5	98.6	93.0	73.2	38.5	85.7	641
	06-08	100.0	100.0	100.0	100.0	99.7	98.9	89.4	65.4	31.5	84.0	642
	09-11	100.0	100.0	99.8	98.3	92.4	76.9	51.7	27.6	9.8	71.3	642
	12-14	100.0	99.8	98.3	90.9	73.7	48.7	26.7	13.8	5.1	61.2	647
	15-17	100.0	99.5	96.8	87.4	68.3	45.4	24.8	12.9	4.4	59.7	634
	18-20	100.0	100.0	100.0	97.1	87.6	68.1	46.7	24.3	8.7	68.9	646
	21-23	100.0	100.0	100.0	99.7	98.4	91.1	69.5	43.9	17.7	77.7	627
TOTALS		100.0	99.9	99.4	96.7	89.9	78.1	60.8	40.1	18.0	73.9	5104

USAFETAC

FORM
AUG 64

0-87-5 (OL A)

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

RELATIVE HUMIDITY

35032 RHEIN-MAIN APT GERMANY/FRANKFURT
STATION STATION NAME

67-76

PERIOD

APR
MONTH

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH	HOURS (L.S.T)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN								MEAN RELATIVE HUMIDITY	TOTAL NO OF OBS	
		10%	20%	30%	40%	50%	60%	70%	80%			
APR	00-02	100.0	100.0	100.0	100.0	98.7	91.9	77.4	51.7	22.1	79.5	594
	03-05	100.0	100.0	100.0	100.0	99.8	96.1	86.4	66.8	31.4	83.6	609
	06-08	100.0	100.0	100.0	99.7	97.3	89.1	71.1	45.8	20.3	77.9	622
	09-11	100.0	100.0	99.4	93.6	78.1	56.3	31.4	13.8	6.1	63.3	622
	12-14	100.0	99.7	94.3	75.2	53.6	32.1	19.8	8.9	3.4	54.3	616
	15-17	100.0	99.2	91.3	68.4	45.4	30.3	20.5	10.3	3.8	52.4	624
	18-20	100.0	100.0	97.7	83.8	66.3	48.5	31.4	16.3	6.9	61.0	606
	21-23	100.0	100.0	100.0	99.5	91.8	76.6	55.7	30.6	13.7	72.2	598
TOTALS		100.0	99.9	97.8	90.0	78.9	65.1	49.2	30.8	13.5	58.0	4891

USAFETAC

FORM
AF 64

0-87-5 (OL A)

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

RELATIVE HUMIDITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-75
PERIOD

MAY
MONTH

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO OF OBS
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
MAY	00-02	100.0	100.0	99.8	99.8	99.7	95.5	88.5	68.2	34.7	84.3	617
	03-05	100.0	100.0	100.0	100.0	100.0	98.9	93.5	76.2	47.5	87.3	629
	06-08	100.0	100.0	100.0	99.8	98.6	89.4	73.7	44.9	23.5	78.5	635
	09-11	100.0	100.0	100.0	95.1	79.3	52.5	32.3	14.3	4.4	63.1	638
	12-14	100.0	100.0	96.0	78.9	53.3	30.0	17.5	8.6	3.2	54.3	630
	15-17	100.0	100.0	94.7	75.1	47.3	32.1	20.1	9.7	3.5	53.5	626
	18-20	100.0	100.0	99.1	89.1	72.0	48.7	33.4	16.9	6.8	62.1	632
	21-23	100.0	100.0	100.0	99.8	96.9	85.8	68.7	40.7	17.1	76.4	636
TOTALS		100.0	100.0	98.7	92.2	80.9	66.6	53.5	34.9	17.6	69.9	5043

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

RELATIVE HUMIDITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-75

July
MONTH

PERIOD

MONITOR

**CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)**

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
JUN	00-02	100.0	100.0	100.0	100.0	99.7	95.7	84.1	60.2	33.4	83.1	605
	03-05	100.0	100.0	100.0	100.0	99.5	97.7	91.7	70.7	44.4	86.3	601
	06-08	100.0	100.0	99.8	98.7	96.1	87.4	72.1	40.6	15.6	70.5	620
	09-11	100.0	100.0	97.8	92.9	77.5	54.1	32.3	14.6	4.7	62.8	623
	12-14	100.0	99.2	93.7	80.5	54.8	32.8	19.2	9.1	2.8	54.7	604
	15-17	100.0	100.0	92.1	77.0	52.1	35.5	23.4	12.7	4.3	55.0	608
	18-20	100.0	100.0	96.5	88.0	68.6	49.3	32.5	19.4	7.	61.9	625
	21-23	100.0	100.0	99.8	98.5	93.9	81.7	63.5	36.6	20.1	75.1	606
TOTALS		100.0	100.0	97.5	92.0	80.3	66.8	52.4	33.0	16.6	69.4	4892

USAFETAC

1992

0-87-5 (OL A)

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

RELATIVE HUMIDITY

35032 RHEIN-MAIN APT GERMANY/FRANKFURT

57-76

JUL
MONTH

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO OF OBS
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
JUL	00-02	100.0	100.0	100.0	99.7	97.5	95.3	87.0	62.4	30.1	72.9	611
	03-05	100.0	100.0	100.0	99.7	98.9	96.6	94.3	77.2	47.3	87.0	615
	06-08	100.0	100.0	99.7	97.9	95.0	90.2	74.9	47.0	19.5	78.1	621
	09-11	100.0	99.8	97.0	93.3	80.3	53.3	29.8	14.9	4.5	62.9	625
	12-14	100.0	98.5	95.0	81.5	52.4	28.9	15.0	8.5	3.2	53.6	599
	15-17	100.0	97.7	95.2	76.3	43.9	25.0	14.7	9.2	3.5	52.1	620
	18-20	100.0	99.0	96.7	89.9	64.9	40.8	23.2	13.6	0.4	59.0	612
	21-23	100.0	100.0	99.2	97.7	94.8	84.0	61.4	29.3	13.3	73.8	611
TOTALS		100.0	99.4	97.9	92.0	78.5	64.3	50.1	32.8	16.0	68.7	4914

USAFETAC

FORM
JUL 64

0-87-5 (OL A)

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

RELATIVE HUMIDITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
PERIOD

AUG
MONTH

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO OF OBS
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
AUG	00-02	100.0	100.0	100.0	100.0	99.8	96.1	87.8	64.5	34.5	83.9	614
	03-05	100.0	100.0	100.0	99.8	99.7	98.1	93.5	76.0	51.4	88.0	629
	06-08	100.0	100.0	100.0	100.0	98.7	90.9	77.9	54.7	34.4	81.5	634
	09-11	100.0	100.0	100.0	94.2	80.5	60.2	37.5	18.1	7.5	65.4	651
	12-14	100.0	99.8	95.5	77.2	52.7	30.6	12.9	10.7	3.3	54.2	628
	15-17	100.0	100.0	93.2	72.9	47.4	26.0	15.8	7.3	2.2	51.9	631
	18-20	100.0	100.0	98.7	90.2	71.7	49.9	28.8	16.4	7.0	61.9	633
	21-23	100.0	100.0	100.0	99.5	96.5	83.7	66.8	38.9	16.9	75.9	638
TOTALS		100.0	100.0	98.4	91.7	80.9	66.9	53.0	35.8	19.7	70.3	5058

2

RELATIVE HUMIDITY

67-76

SEP
MONTH

**CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE
(FROM HOURLY OBSERVATIONS)**

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO OF OBS.
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
SEP	00-02	100.0	100.0	100.0	100.0	100.0	99.3	97.2	84.7	56.6	90.1	602
	03-05	100.0	100.0	100.0	100.0	100.0	99.8	99.2	92.8	72.2	92.9	612
	06-08	100.0	100.0	100.0	100.0	100.0	99.5	96.3	80.2	54.1	89.1	616
	09-11	100.0	100.0	100.0	99.4	95.3	82.4	61.4	31.7	14.1	74.0	619
	12-14	100.0	100.0	99.7	94.2	79.2	50.4	29.6	12.4	4.6	62.4	605
	15-17	100.0	100.0	99.5	91.6	74.0	49.4	28.3	11.1	4.7	61.4	622
	18-20	100.0	100.0	100.0	99.3	94.1	82.5	62.6	34.1	12.2	73.8	607
	21-23	100.0	100.0	100.0	100.0	99.8	97.0	90.0	64.3	34.2	84.0	603
TOTALS		100.0	100.0	99.9	98.1	92.8	82.5	70.6	51.4	31.6	78.5	4886

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

RELATIVE HUMIDITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-75
PERIOD

OCT
MONTH

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO OF OBS
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
OCT	00-02	100.0	100.0	100.0	100.0	100.0	100.0	98.7	90.5	62.4	91.5	603
	03-05	100.0	100.0	100.0	100.0	100.0	99.8	99.5	93.0	71.4	93.1	625
	06-08	100.0	100.0	100.0	100.0	100.0	100.0	98.9	9.3	69.4	92.4	631
	09-11	100.0	100.0	100.0	100.0	98.0	91.5	80.5	59.4	30.1	81.8	645
	12-14	100.0	100.0	99.8	97.8	89.7	73.0	53.5	28.6	11.6	70.9	630
	15-17	100.0	100.0	100.0	97.7	90.2	74.2	57.0	29.4	12.2	71.5	640
	18-20	100.0	100.0	100.0	100.0	100.0	96.2	80.1	57.6	29.6	82.5	635
	21-23	100.0	100.0	100.0	100.0	100.0	99.8	96.1	79.7	52.3	88.4	640
TOTALS		100.0	100.0	100.0	99.4	97.2	91.8	83.8	65.9	42.4	84.0	5049

USAFETAC

FORM
JUL 64

0-87-5 (OL A)

DATA PROCESSING BRANCH
ETAC/USAF
AIR WEATHER SERVICE/MAC

RELATIVE HUMIDITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

67-76
PERIOD

Rel V
MONTH

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE (FROM HOURLY OBSERVATIONS)

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO OF OBS
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
NDV	00-02	100.0	100.0	100.0	100.0	99.6	99.5	96.9	85.3	58.9	90.0	587
	03-05	100.0	100.0	100.0	100.0	100.0	99.8	97.6	88.1	64.8	91.4	630
	06-08	100.0	100.0	100.0	100.0	100.0	99.8	97.6	89.5	62.9	90.9	628
	09-11	100.0	100.0	100.0	100.0	99.7	98.0	90.8	74.4	41.0	86.5	610
	12-14	100.0	100.0	100.0	99.7	99.0	92.5	74.3	51.4	23.9	79.8	603
	15-17	100.0	100.0	100.0	99.7	99.2	93.9	78.7	52.5	24.6	80.5	610
	18-20	100.0	100.0	100.0	100.0	99.7	98.2	91.5	70.9	38.6	85.8	621
	21-23	100.0	100.0	100.0	100.0	99.7	99.2	94.7	79.4	51.9	88.5	617
TOTALS		100.0	100.0	100.0	99.9	99.6	97.6	90.3	73.9	45.9	86.7	4906

USAFETAC

FORM
JUL 64

0-87-5 (OL A)

RELATIVE HUMIDITY

35032
STATION

RHEIN-MAIN APT GERMANY/FRANKFURT
STATION NAME

57-76

PERIOD

D & C
MON7

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NO OF OBS
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
DEC	00-02	100.0	100.0	100.0	100.0	100.0	99.7	95.7	85.7	52.1	88.7	627
	03-05	100.0	100.0	100.0	100.0	100.0	99.2	96.9	86.8	53.8	89.1	645
	06-08	100.0	100.0	100.0	100.0	100.0	99.7	95.9	85.6	49.0	88.6	641
	09-11	100.0	100.0	100.0	100.0	100.0	98.9	94.1	77.1	38.1	86.3	645
	12-14	100.0	100.0	100.0	99.7	99.5	95.3	85.5	61.1	25.9	82.1	633
	15-17	100.0	100.0	100.0	100.0	99.4	97.5	88.5	68.6	27.7	83.4	650
	18-20	100.0	100.0	100.0	100.0	100.0	99.2	93.4	79.0	37.7	86.2	632
	21-23	100.0	100.0	100.0	100.0	100.0	99.7	96.2	82.8	47.2	87.8	634
TOTALS		100.0	100.0	100.0	100.0	99.9	98.7	93.3	78.3	41.5	86.5	5104

U S AIR FORCE
ENVIRONMENTAL TECHNICAL
APPLICATIONS CENTER

PART F

PRESSURE SUMMARY

Presented in this part are two tables giving the means, standard deviations, and total number of observations of station pressure and sea-level pressure by month and annual for the local hourly observations corresponding to the eight 3-hourly synoptic times GCT. The same computations are also provided at the bottom of the page for all hours combined. All years of data available are combined in both of these tables, although the overall period is limited by service as indicated below.

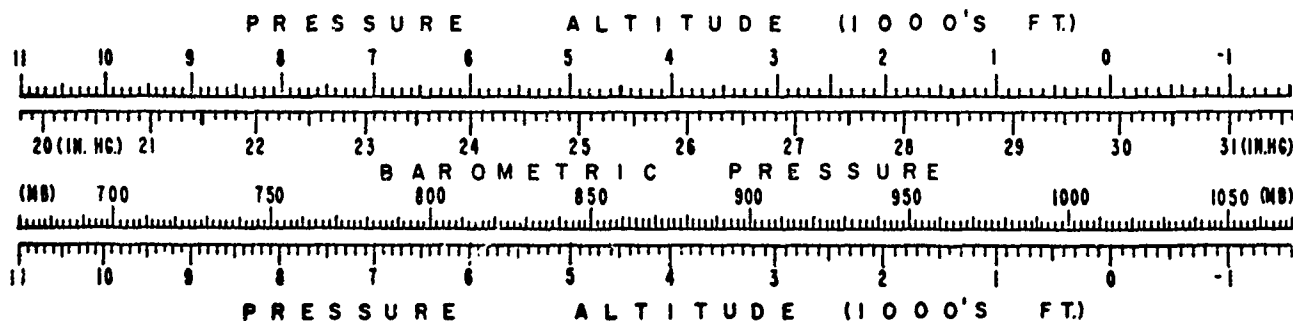
NOTES: Station pressure not reported for all services until late in 1945.

Station pressure reported only at 6-hourly times for Air Force stations from Jan 64 - Jul 65.

METAR stations do not report Sea-level pressure for the period Jan 68 - Dec 70.

1. Station pressure is presented in the table in inches of mercury.
2. Sea-level pressure is presented in millibars.

Provided below is a scale to convert station pressure values in inches of mercury or millibars to pressure-altitude in 1000's of feet. This scale is an enlarged model of the pressure-altitude scale in the Smithsonian Meteorological Tables.



DATA PROCESSING BRANCH
USAF ETAC
AIR WEATHER SERVICE/MAC

MEANS AND STANDARD DEVIATIONS

STATION PRESSURE IN INCHES HG FROM HOURLY OBSERVATIONS

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 71-76

STATION		STATION NAME												YEARS											
HRS (LST)		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL											
00	MEAN	29.667	29.651	29.607	29.561	29.542	29.581	29.594	29.625	29.619	29.679	29.651	29.692	29.621											
	S D	.250	.325	.249	.186	.173	.165	.138	.131	.200	.278	.264	.347	.238											
	TOTAL OBS	160	148	156	151	160	159	158	166	163	139	130	160	1850											
03	MEAN	29.666	29.639	29.592	29.543	29.541	29.578	29.588	29.618	29.609	29.622	29.613	29.699	29.610											
	S D	.252	.324	.259	.188	.184	.164	.136	.137	.207	.298	.275	.342	.244											
	TOTAL OBS	166	150	168	158	169	163	158	165	158	171	161	177	1964											
06	MEAN	29.664	29.642	29.607	29.558	29.551	29.595	29.604	29.632	29.622	29.617	29.622	29.690	29.617											
	S D	.248	.325	.263	.191	.183	.6	.139	.136	.206	.294	.272	.338	.241											
	TOTAL OBS	169	149	171	161	170	163	167	171	163	168	166	168	1986											
09	MEAN	29.657	29.670	29.627	29.561	29.556	29.602	29.620	29.645	29.634	29.648	29.634	29.728	29.632											
	S D	.251	.334	.262	.199	.180	.167	.136	.133	.211	.306	.285	.332	.245											
	TOTAL OBS	170	146	169	164	167	173	170	179	167	169	165	177	2016											
12	MEAN	29.659	29.685	29.602	29.525	29.542	29.581	29.599	29.632	29.620	29.638	29.620	29.713	29.618											
	S D	.246	.314	.263	.202	.178	.162	.131	.128	.208	.295	.285	.341	.244											
	TOTAL OBS	165	148	173	162	169	162	160	170	156	164	158	169	1956											
15	MEAN	29.663	29.642	29.584	29.506	29.525	29.556	29.574	29.606	29.599	29.626	29.597	29.699	29.599											
	S D	.234	.326	.256	.197	.171	.167	.134	.126	.205	.288	.279	.338	.242											
	TOTAL OBS	164	145	166	160	164	155	168	166	170	176	156	175	1965											
18	MEAN	29.660	29.664	29.593	29.514	29.511	29.567	29.571	29.594	29.608	29.624	29.619	29.707	29.603											
	S D	.252	.322	.244	.193	.170	.158	.134	.133	.201	.282	.280	.320	.240											
	TOTAL OBS	163	150	168	157	165	166	159	164	165	171	167	171	1966											
21	MEAN	29.652	29.676	29.599	29.547	29.549	29.578	29.593	29.620	29.622	29.646	29.626	29.703	29.618											
	S D	.258	.320	.255	.195	.167	.159	.128	.131	.201	.289	.275	.334	.240											
	TOTAL OBS	169	153	165	156	173	160	163	173	158	170	164	169	1973											
ALL HOURS	MEAN	29.661	29.659	29.601	29.539	29.540	29.580	29.593	29.622	29.616	29.636	29.622	29.704	29.615											
	S D	.248	.323	.256	.195	.176	.164	.135	.132	.205	.292	.277	.336	.242											
	TOTAL OBS	1326	1189	1336	1269	1337	1301	1303	1354	1300	1328	1267	1366	15676											

DATA PROCESSING BRANCH
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MEANS AND STANDARD DEVIATIONS

SEA LEVEL PRESSURE IN MBS FROM HOURLY OBSERVATIONS

35032 RHEIN-MAIN APT GERMANY/FRANKFURT 67-76

STATION		STATION NAME												YEARS											
HRS (LST)		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL											
00	MEAN	1017.7	1015.8	1016.0	1014.9	1014.5	1016.5	1017.1	1016.5	1017.2	1018.8	1016.4	1019.0	1016.7											
	S D	9.916	11.456	9.187	8.202	6.668	5.405	5.539	4.936	6.927	8.917	10.320	11.307	8.570											
	TOTAL OBS	306	268	305	296	307	297	304	310	298	309	298	294	3592											
03	MEAN	1017.5	1015.6	1015.8	1014.6	1014.4	1016.5	1017.2	1016.4	1017.1	1018.5	1016.1	1018.9	1016.5											
	S D	9.906	11.535	9.198	7.892	6.495	5.430	5.017	4.967	6.869	9.037	10.339	11.330	8.531											
	TOTAL OBS	308	266	309	298	308	297	303	305	298	308	300	291	3591											
06	MEAN	1017.2	1015.7	1016.0	1015.0	1014.9	1016.8	1017.4	1016.8	1017.3	1018.5	1015.9	1019.0	1016.7											
	S D	9.870	11.576	9.338	7.856	6.521	5.408	5.738	5.045	7.037	9.259	10.671	11.359	8.644											
	TOTAL OBS	308	270	307	294	307	299	304	304	297	309	299	293	3591											
09	MEAN	1018.0	1016.4	1016.5	1015.1	1014.9	1016.9	1017.5	1017.0	1017.6	1019.1	1016.6	1019.6	1017.1											
	S D	9.865	11.539	9.365	7.935	6.670	5.434	5.054	5.014	6.946	9.413	10.469	11.290	8.615											
	TOTAL OBS	309	269	309	299	308	297	301	309	300	305	298	295	3599											
12	MEAN	1017.6	1016.1	1015.8	1014.2	1014.3	1016.2	1016.9	1016.3	1016.9	1018.6	1016.2	1019.2	1016.5											
	S D	9.978	11.545	9.275	7.927	6.350	5.769	5.070	4.832	6.914	9.278	10.365	11.381	8.606											
	TOTAL OBS	308	269	309	296	309	299	301	309	297	309	297	294	3597											
15	MEAN	1017.0	1015.2	1014.8	1013.3	1013.5	1015.6	1016.0	1015.4	1016.0	1017.7	1015.6	1018.7	1015.7											
	S D	10.283	11.223	9.078	7.695	6.301	5.387	5.043	4.749	6.763	9.258	10.235	11.367	8.524											
	TOTAL OBS	310	268	306	298	309	298	303	306	297	306	298	293	3592											
18	MEAN	1017.5	1015.6	1015.1	1013.3	1013.3	1015.3	1015.7	1015.3	1016.2	1018.4	1016.2	1019.1	1015.9											
	S D	9.724	11.248	9.029	8.315	6.330	5.258	4.904	4.752	6.734	8.866	10.205	11.152	8.471											
	TOTAL OBS	308	270	310	298	309	298	304	310	299	306	297	293	3602											
21	MEAN	1017.7	1016.0	1015.7	1014.4	1014.4	1016.4	1016.7	1016.3	1017.1	1018.8	1016.3	1019.2	1016.6											
	S D	9.786	11.402	9.093	7.819	6.243	5.330	4.889	4.862	6.823	8.980	10.477	11.142	8.455											
	TOTAL OBS	309	271	304	297	307	298	306	308	296	308	297	290	3591											
ALL HOURS	MEAN	1017.5	1015.8	1015.7	1014.3	1014.3	1016.3	1016.8	1016.2	1016.9	1018.5	1016.2	1019.1	1016.5											
	S D	9.908	11.427	9.197	7.974	6.462	5.448	5.193	4.920	6.888	9.123	10.376	11.277	8.561											
	TOTAL OBS	2466	2151	2459	2376	2464	2383	2426	2461	2382	2460	2364	2343	28755											